



# DELAWARE SOLID WASTE AUTHORITY

Richard P. Watson, P.E., BCEE  
Chief Executive Officer

Robin M. Roddy, P.E., BCEE  
Chief Operating Officer

July 25, 2018

## Board of Directors

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Chairman  
Timothy P. Sheldon  
Vice Chairman  
Tonda L. Parks  
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William J. Riddle

Mr. David Fees  
Acting Air Director  
Division of Air Quality  
Department of Natural Resources and Environmental Control  
State Street Commons  
100 West Water Street, Suite 6A  
Dover, DE 19904

Dear Mr. Fees:

**RE: AQM-003/00111-Renewal 3  
CHERRY ISLAND LANDFILL  
SEMI-ANNUAL REPORT**

Enclosed are two (2) copies of the Cherry Island Landfill (CIL) semi-annual report for January 1, 2018 through June 30, 2018. This report is submitted to comply with permit AQM-003/00111-Renewal 3. Please note the entire permit number does not fit on all of the forms. Therefore AQM-003/00111-R3 should be taken to represent the full permit identification.

I certify the statements and information provided in this document, to the best of my knowledge, are true, accurate and complete. If you have any questions about any of the information provided please contact V. Nicole Gallagher Burkhardt at (302) 764-5385.

Yours truly,

Robin M. Roddy, P.E., BCEE  
Chief Operating Officer

## Attachments

c: R. P. Watson, P.E., BCEE  
L. V. Miller, P.E., BCEE  
L. K. Baer, P.E., BCEE  
V. N. G. Burkhardt, P.E.  
Brad Klotz (DNREC)  
U.S. EPA (3AP20)

CIL-18.67

1128 S. Bradford Street, Dover, Delaware 19904  
Phone: (302) 739-5361 Fax: (302) 739-4287

CITIZENS' RESPONSE LINE: 1-800-404-7080 [www.dswa.com](http://www.dswa.com)

**7 DE Admin. Code 1130  
(Title V) State Operating Permit Program  
Air Quality Management Section**

**AQM-1001DD**

**SEMI-ANNUAL REPORT**

**FOR DEPARTMENT USE, ONLY**

**DATE RECEIVED:**

**DATE REVIEWED:**

**REVIEWED BY:**

The Company shall submit to the Department and EPA Region III a report of any required monitoring and a report of any deviation(s) from permit requirements. This report shall be submitted no later than August 1 (covering the period from January 1 through June 30) and February 1 (covering the period from July 1 through December 31) of each calendar year. [Reference 7 **DE Admin. Code 1130** (Title V) State Operating Permit Condition 3.3.2 and 7 **DE Admin. Code 1130** Sections 6.1.3.3.1, 6.1.3.3.2, and 6.1.3.3.3.4 dated 12/11/00] Refer to the Instructions for Completing Semi-Annual Reports and Form AQM-1001DD dated July 27, 2001 and revised November 22, 2004 for questions concerning the use of this form.

**Part A FACILITY INFORMATION**

- |   |  |                                    |
|---|--|------------------------------------|
| 1. Facility Name: Cherry Island Landfill (CIL)  |  |                                    |
| 2. Facility Street Address: 1706 East 12 <sup>th</sup> Street   |  |                                    |
| 3. City: Wilmington   | 4. State: DE                                 | 5. Zip Code: 19809                 |
| 6. Permit No.: <b>AQM-003/00111-R3</b>  | 7. Facility ID No.: 1000300111<br>(9 digits) | 8. Date Permit Issued: 08/01/2017  |
| 9. What is the Reporting Period? 01/01/2018 TO 06/30/2018   |  | 10. Date Form Prepared: 07/25/2018 |
| 11. Technical Contact: V. Nicole Gallagher Burkhardt, P.E. Title: Landfill Gas Engineer<br><br>Phone Number: 302-764-5385 Fax Number: 302-764-5386 E-Mail Address: vn gb@dswa.com   |  |                                    |
| 12. Has any of the information contained in Items 1 through 5 of Part A and/or Part E, Responsible Official, changed from that in the issued 7 <b>DE Admin. Code 1130</b> Operating Permit? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO<br><br>If YES, submit a request for an Administrative Permit Amendment per the requirements of 7 <b>DE Admin. Code 1130</b> Section 7.3 |  |                                    |

**Part B REPORT OF ANY REQUIRED MONITORING**

- |  |   |
|--|---|
| 1. Are you submitting an Initial Report of Monitoring?<br>If YES, complete Table 1 – Report of Any Required Monitoring.<br>If NO, go to Question No. 2.  | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| 2. Are you submitting a Revised Report of Monitoring?<br>If YES, complete Table 1 – Report of Any Required Monitoring.<br>If NO, Complete Part C; Part D, if applicable; Part E; and Part F.<br><i>Reference 7 <b>DE Admin. Code 1130</b> Section 6.1.3.3.1 dated 12/11/00 and the 7 <b>DE Admin. Code 1130</b> (Title V) State Operating Permit Condition 3.3.2.1</i> | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

**Part C IDENTIFICATION OF DEVIATIONS**

- |  |   |
|--|---|
| 1. Do you have any deviations that you are reporting?<br>If YES, complete Part C – Identification of Deviations – Table 2.<br>If NO, complete Part D, if applicable; Part E; and Part F.<br><i>Reference 7 <b>DE Admin. Code 1130</b> Section 6.1.3.3.2 and Section 6.1.3.3.3.4 dated 12/11/00 and the 7 <b>DE Admin. Code 1130</b> (Title V) State Operating Permit Condition 3.3.2.2</i> | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
|--|---|

**7 DE Admin. Code 1130  
(Title V) State Operating Permit Program  
Air Quality Management Section  
SEMI-ANNUAL REPORT**

**AQM-1001DD**

**Part D ADDITIONAL INFORMATION**

1. Does the Company possess any additional information that demonstrates compliance and/or non-compliance with any applicable requirement contained in the issued Title V permit? ☐ YES ☒ NO  
If YES, complete Table 3 – Additional Information  
*Reference Condition No. 3.3.2.3*
2. Is the Company submitting any attachments with the Semi-Annual Report? ☒ YES ☐ NO  
If YES, please identify all attachments. If additional space is needed, please use Table 4 of this Form

**Part E CERTIFICATION BY RESPONSIBLE OFFICIAL**

I, the undersigned, hereby certify under penalty of law that I am a Responsible Official and that I have personally examined and am familiar with the information submitted in this document and all of its attachments as to truth, accuracy, and completeness of information. I certify based on information and belief formed after reasonable inquiry the statements and information in this document are true, accurate, and complete. By signing this form, I certify that I have not changed, altered, or deleted any portions of this form.

Responsible Official Signature: \_\_\_\_\_

Date: 7/25/18

Responsible Official Name: Robin M. Roddy, P.E., BCEE Phone Number: 302-739-5361

Responsible Official Title: Chief Operating Officer

**Part F SUBMITTAL INFORMATION**

1. The Semi-Annual Report is due February 1 and August 1 of each calendar year.
2. The Semi-Annual Report shall be submitted to the following locations:

**Submit One (1) Original and One (1) Copy:**

**State of Delaware – DNREC  
Division of Air and Waste Management  
156 South State Street  
Dover, DE 19901  
Attn: Program Administrator**

**Submit One (1) Copy:**

**United States Environmental Protection Agency  
Associate Director of Enforcement (3AP12)  
1650 Arch Street  
Philadelphia, PA 19103**

*Reference 7 DE Admin. Code 1130 (Title V) State Operating Permit Condition 2.1.3 and 3.3.3.1 and 7 DE Admin. Code 1130 Sections 6.3.5.1 and 6.3.5.4 dated 12/11/00.*

**7 DE Admin. Code 1130 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-Renewal 3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
1	Condition 3 -Table 1 (a)(1)(i) The flares shall be operated with no visible emissions as determined by Reference Method 22 (RM 22), except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.	Monitoring of emissions from flares in accordance with Condition 3 - Table 1 (a)(1)(i).	NO	
1	Condition 3 - Table 1 (a)(1)(iv)(A) Each portable passive flare shall be used for temporary installation and operation only as odor control device. The passive flares do not in any way relieve the Company of the requirements of Condition 3–Table 1(b), (c) & (d), and cannot be used as a substitute control device.	Record keeping of passive flare use in accordance with Condition 3 - Table 1 (a)(1)(iv)(A).	NO	
1	Condition 3 - Table 1 (a)(1)(iv)(B) Each portable passive flare assembly shall be tagged with a permanent identification that designates and identifies an individual flare unit. This designation shall be used in all relocation correspondence.	Record keeping of passive flare identification in accordance with Condition 3 - Table 1 (a)(1)(iv)(B).	NO	
1	Condition 3 - Table 1 (a)(1)(iv)(C) The identification tag shall be of a physical form approved by the Department, such as a welded or riveted plate or engraving.	Record keeping of identification form in accordance with Condition 3 - Table 1 (a)(1)(iv)(C).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
1	Condition 3 - Table 1 (a)(1)(iv)(D) Each flare unit and connected piping system shall be maintained in proper operating condition.	Monitoring of flare unit condition in accordance with Condition 3 - Table 1 (a)(1)(iv)(D).	NO	
1	Condition 3 - Table 1 (a)(1)(iv)(E) Each flare unit shall be equipped with a flame arrester to prevent flashback to the landfill.	Record keeping of passive flare flame arrester in accordance with Condition 3 - Table 1 (a)(1)(iv)(E).	NO	
1	Condition 3 - Table 1 (a)(1)(iv)(F) Each flare unit relocation shall be for a period of time not to exceed 180 days unless another time period is submitted to and approved by the Department. Any request to extend that time period shall be submitted to the Department a minimum of 30 days prior to expiration of the 180 days.	Record keeping of passive flare usage in accordance with Condition 3 - Table 1 (a)(1)(iv)(F).	NO	
1	Condition 3 - Table 1 (a)(1)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Monitoring and record keeping in accordance with Condition 3 - Table 1 (a)(1)(v).	NO	
1	Condition 3 - Table 1 (a)(1)(vi)(A) The number of hours and days each flare is in use.	Monitoring of passive flare usage in accordance with Condition 3 - Table 1 (a)(1)(vi)(A).	NO	
1	Condition 3 - Table 1 (a)(1)(vi)(B) The operational limitations of Condition 3-Table 1(a)(1)(iv).	Monitoring and record keeping in accordance with Condition 3 - Table 1 (a)(1)(vi)(B).	NO	
1	Condition 3 - Table 1 (a)(1)(vii) In addition to that required by Condition 3(b)(1)(ii) of this permit, the owner/operator shall conduct a daily visible emissions observation on passive flares in use Monday - Friday, excluding holidays and weather related closing, for at least ten (10) minutes.	Testing in accordance with Condition 3 - Table 1 (a)(1)(vii).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
1	Condition 3 - Table 1 (a)(1)(ix) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(c)(2) of this permit, the Company shall maintain records of the information monitored in Condition 3 – Table 1(a)(1)(vi).	Record keeping in accordance with Condition 3 - Table 1 (a)(1)(ix).	NO	
1	Condition 3 - Table 1 (a)(1)(x)(A) A notification to the Department within 24 hours after relocation of flares within or to any DSWA landfill sites. This notification can be made via email or fax which includes the following information:	Reporting of passive flare relocation in accordance with Condition 3 - Table 1 (a)(1)(x)(A).	YES	Separate reports submitted throughout operating period
1	Condition 3 - Table 1 (a)(1)(x)(A)(1) Which flare(s) is (are) being relocated.	Reporting of passive flare relocation in accordance with Condition 3 - Table 1 (a)(1)(x)(A)(1).	YES	Separate reports submitted throughout operating period
1	Condition 3 - Table 1 (a)(1)(x)(A)(2) The site of the relocated flare(s).	Reporting of passive flare relocation in accordance with Condition 3 - Table 1 (a)(1)(x)(A)(2).	YES	Separate reports submitted throughout operating period
1	Condition 3 - Table 1 (a)(1)(x)(A)(3) The reason for the flare(s) relocation.	Reporting of passive flare relocation in accordance with Condition 3 - Table 1 (a)(1)(x)(A)(3).	YES	Separate reports submitted throughout operating period
1	Condition 3 - Table 1 (a)(1)(x)(A)(4) The date and time the flare(s) was (were) relocated.	Reporting of passive flare relocation in accordance with Condition 3 - Table 1 (a)(1)(x)(A)(4).	YES	Separate reports submitted throughout operating period
1	Condition 3 - Table 1 (a)(1)(x)(A)(5) The intended period of time the flare(s) is(are) proposed for use at that location.	Reporting of passive flare relocation in accordance with Condition 3 - Table 1 (a)(1)(x)(A)(5).	YES	Separate reports submitted throughout operating period



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
1	Condition 3 - Table 1 (a)(1)(x)(B) The Company shall calculate/estimate the emissions from all passive flares used at the site based on actual hours of operation and include this information in the annual emissions inventory report.	Reporting of passive flare emissions in accordance with Condition 3 - Table 1 (a)(1)(x)(B).	YES	April 25, 2018
1	Condition 3 - Table 1 (a)(1)(xi) In addition to that required by Condition 3(c)(3) of this permit, compliance shall be based on monitoring, record keeping and reporting requirements of this section.	Record keeping in accordance with Condition 3 - Table 1 (a)(1)(xi).	NO	
2	Condition 3 - Table 1 (b)(1)(i) The flare shall be operated with no visible emissions as determined by RM 22, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.	Monitoring of flare visible emissions in accordance with Condition 3 - Table 1 (b)(1)(i).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(A)(1) NOx: A rate of 8.1 pounds per hour.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(A)(1).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(A)(2) NOx: 23.9 tons per 12-month rolling period.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(A)(2).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(B)(1) CO: A rate of 27.0 pounds per hour.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(B)(1).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(B)(2) CO: 79.6 tons per 12-month rolling period.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(B)(2).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(C)(1) PM: A rate of 2.3 pounds per hour.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(C)(1).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(C)(2) PM: 6.6 tons per 12-month rolling period.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(C)(2).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(ii)(D)(1) NMOC: A rate of 0.7 tons pounds per hour.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(D)(1).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(D)(2) NMOC: 2.1 tons per 12-month rolling period.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(D)(2).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(E)(1) SOx: A rate of 39.7 pounds per hour.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(E)(1).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(E)(2) SOx: 58.5 tons per 12-month rolling period.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(E)(2).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(F)(1) HAPs: A rate of 0.027 pounds per hour.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(F)(1).	NO	
2	Condition 3 - Table 1 (b)(1)(ii)(F)(2) HAPs: 0.08 tons per 12-month rolling period.	Monitoring of flare emissions in accordance with Condition 3 - Table 1 (b)(1)(ii)(F)(2).	NO	
2	Condition 3 - Table 1 (b)(1)(iii)(A) The flares shall be operated with a flame present at all times and shall be operated at all times when collected landfill gas is routed to the system.	Record keeping of flare operation in accordance with Condition 3 - Table 1 (b)(1)(iii)(A).	NO	
2	Condition 3 - Table 1 (b)(1)(iii)(B) The flare flame detection device shall be in proper operation whenever the flare is in operation.	Record keeping of flame detection device operation in accordance with Condition 3 - Table 1 (b)(1)(iii)(B).	NO	
2	Condition 3 - Table 1 (b)(1)(iii)(C) The owner/operator shall adhere to the flare gas heat content specifications in 40 CFR 60, Subpart A, §60.18(c)(3)(ii) and the flare exit velocity specifications in §60.18(c)(4).	Record keeping of flare gas heat content and exit velocity in accordance with Condition 3 - Table 1 (b)(1)(iii)(C).	NO	



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(iii)(D) Landfill gas flow shall be diverted to the flare system for combustion within one (1) hour of gas compression plant shutdown during normal operating hours and within four (4) hours outside of normal operating hours. Normal operating hours shall mean Monday through Friday, 0700 hours until 1500 hours, excluding holidays and weather-related landfill closings.	Record keeping of response time to shut downs in accordance with Condition 3 - Table 1 (b)(1)(iii)(D).	NO	
2	Condition 3 - Table 1 (b)(1)(iii)(E) The flares shall be operated according to the latest startup, shutdown, and malfunction plan (SSMP) during all periods of startup, shutdown, and malfunction.	Record keeping of flare operation in accordance with Condition 3 - Table 1 (b)(1)(iii)(E).	NO	
2	Condition 3 - Table 1 (b)(1)(iii)(F) All structural and mechanical components of the flare and gas collection and treatment system shall be maintained in proper operating condition.	Record keeping of flare and gas system maintenance in accordance with Condition 3 - Table 1 (b)(1)(iii)(F).	NO	
2	Condition 3 - Table 1 (b)(1)(iii)(G) The flare shall have an NMOC destruction efficiency of at least 98%.	Record keeping of NMOC destruction efficiency in accordance with Condition 3 - Table 1 (b)(1)(iii)(G).	NO	
2	Condition 3 - Table 1 (b)(1)(iii)(H) The total amount of landfill gas to the flare shall be no more than a total of 1,594.1 MMscf per 12-month rolling period.	Monitoring of total landfill gas to the flare in accordance with Condition 3 - Table 1 (b)(1)(iii)(H)	NO	
2	Condition 3 - Table 1 (b)(1)(iv)(A) The flares shall be operated in conjunction with the gas collection system to control odors as a top priority.	Monitoring of flare operation to reduce odors in accordance with Condition 3 - Table 1 (b)(1)(iv)(A).	NO	
2	Condition 3 - Table 1 (b)(1)(iv)(B) The maximum flow to the flare shall be no more than 4,500 scfm at 50% methane.	Record keeping of flare flow in accordance with Condition 3 - Table 1 (b)(1)(iv)(B).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(iv)(C) The flare shall be operated as per the manufacturer's recommendation. Flare operating parameters shall include but are not limited to flare flow rate, flame temperature and residence time.	Record keeping in accordance with Condition 3 - Table 1 (b)(1)(iv)(C).	NO	
2	Condition 3 - Table 1 (b)(1)(iv)(D) In the event that the flare is inoperable, the following actions shall be taken: The flare valve shall be closed; and all valves in the collection system contributing to venting of gas to the atmosphere shall be closed within one (1) hour.	Record keeping in accordance with Condition 3 - Table 1 (b)(1)(iv)(D).	NO	
2	Condition 3 - Table 1 (b)(1)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping in accordance with Condition 3 - Table 1 (b)(1)(v).	NO	
2	Condition 3 - Table 1 (b)(1)(vi)(A) The owner/operator shall monitor the flare to ensure that it is operated and maintained in conformance with its design.	Monitoring flare operation in accordance with Condition 3 - Table 1 (b)(1)(vi)(A).	NO	
2	Condition 3 - Table 1 (b)(1)(vi)(B) The owner/operator shall monitor the presence of a flare pilot flame by using a thermocouple or any other equivalent device to detect the presence of a flame.	Monitoring of flare pilot flame in accordance with Condition 3 - Table 1 (b)(1)(vi)(B).	NO	
2	Condition 3 - Table 1 (b)(1)(vi)(C) The owner/operator shall monitor the flare flame monitoring equipment shall be inspected monthly.	Record keeping of flame monitoring equipment inspection in accordance with Condition 3 - Table 1 (b)(1)(vi)(C).	NO	
2	Condition 3 - Table 1 (b)(1)(vi)(D) The owner/operator shall monitor the flow rate of landfill gas to the flare each day.	Monitoring gas flow rate in accordance with Condition 3 - Table 1 (b)(1)(vi)(D).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(vi)(E) The owner/operator shall monitor the operational standards and limitations of Condition 3—Table 1(b)(1)(iii) & (iv).	Monitoring the operational standards and limitations in accordance with Condition 3 - Table 1 (b)(1)(vi)(E).	NO	
2	Condition 3 - Table 1 (b)(1)(vi)(F) The owner/operator shall monitor compliance with the opacity requirements of Condition 3-Table 1(b)(1)(i) shall be determined once per quarter for a two (2) hour period using RM 22 while flare is in operation from 40 CFR 60, Appendix A, dated 7/1/05. If visual emissions are determined to be in excess of the limitation in Condition 3-Table 1(b)(1)(i), the owner/operator shall take all means necessary to minimize emissions and to operate the flare without visible emissions. The term "all means necessary" may include, but is not limited to shutting down the flare.	Monitoring the opacity requirements in accordance with Condition 3 - Table 1 (b)(1)(vi)(F).	NO	
2	Condition 3 - Table 1 (b)(1)(vi)(G) While in operation, a flow meter shall be used to continuously monitor and record the gas flow rate to the flare. The owner/operator shall follow all applicable requirements for the landfill outlined by 40 CFR Part 60.756-Monitoring of operations and 40 CFR Part 60.18(c)-General control device requirements (for flares).	Monitoring of flow rates in the flares in accordance with Condition 3 - Table 1 (b)(1)(vi)(G).	NO	
2	Condition 3 - Table 1 (b)(1)(vi)(H) The owner and/or operator shall monitor the time, date, and length of all SSM and any actions taken at such times.	Monitoring of SSM in accordance with Condition 3 - Table 1 (b)(1)(vi)(H).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(vii)(A) The performance of the flow monitor shall be demonstrated at least once each year by passing the tests given in 40 CFR 60 Appendix B, Performance Specification 6 except for calibration drift.	Testing of flow monitor in accordance with Condition 3 - Table 1 (b)(1)(vii)(A).	NO	
2	Condition 3 - Table 1 (b)(1)(vii)(B) The owner/operator shall notify the Department at least thirty (30) days prior to any flow monitor test to give the Department the opportunity to witness the test.	Testing of flow monitor in accordance with Condition 3 - Table 1 (b)(1)(vii)(B).	NO	
2	Condition 3 - Table 1 (b)(1)(vii)(C) DSWA may use GEM testing and lab sample analysis results to perform calculations referred by Condition 3-Table 1(b)(iii)(C) on a quarterly basis. The Company shall perform calculations quarterly as identified by federal regulation 40 CFR 60, Subpart A, §60.18(f)(3). As an option, the Owner or Operator may sample the landfill gas, analyze it for net heating value using the method given in 40 CFR 60, Subpart A, §60.18(f)(3), dated 7/1/05, and use the result and the gas flowrate to demonstrate compliance.	Testing in accordance with Condition 3 - Table 1 (b)(1)(vii)(C).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(vii)(D) During normal operating hours, the owner and/or operator shall conduct daily qualitative visible emissions observations (similar to Method 22) of the flare to evaluate the presence or absence of smoke and/or visible air contaminants during a continuous five (5) minute period while the flare is operating. If visible emissions are detected, the owner and/or operator shall conduct a visual emissions determination as required in Condition 3 - Table 1 (b)(1)(vi)(F). Normal operating hours shall mean Monday through Friday, 0700 hours until 1500 hours, excluding holidays and weather-related landfill closings.	Testing of visible emissions in accordance with Condition 3 - Table 1 (b)(1)(vii)(D).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(A) Periods of operation for each flare.	Record keeping of flare operation in accordance with Condition 3 - Table 1 (b)(1)(ix)(A).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(B) Reason flare is not in operation.	Record keeping of reason for flare down time in accordance with Condition 3 - Table 1 (b)(1)(ix)(B).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(C) Daily, monthly and 12-month rolling usage of landfill gas to the flare.	Record keeping of landfill gas usage in accordance with Condition 3 - Table 1 (b)(1)(ix)(C).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(D) RM 22 records including daily visible emissions log.	Record keeping of RM 22 records in accordance with Condition 3 - Table 1 (b)(1)(ix)(D).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(E) Daily odor log, as required by Condition 3 - Table 1(f)(2)(v), including the presence or absence of odor, the wind direction, the location monitored, and actions taken in response to odors found.	Record keeping of daily odor log in accordance with Condition 3 - Table 1 (b)(1)(ix)(E).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(ix)(F) Inspection and maintenance records of the flare including flame and pilot flame monitoring.	Record keeping of inspections and maintenance of flares in accordance with Condition 3 - Table 1 (b)(1)(ix)(F).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(G) The monthly and rolling twelve (12) month total emissions shall be calculated by using landfill gas flow rate to the flare, hours of flare operation, site specific data, stack test results and AP-42 factors as appropriate, and recorded each month in a log for each of the following pollutants: Nitrogen oxides; Carbon monoxide; Particulate Matter; Non-methane organic compounds; Sulfur oxides; Methane; and HAPs.	Record keeping of emissions totals in accordance with Condition 3 - Table 1 (b)(1)(ix)(G).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(1) The Company shall keep copies of the Data showing flame presence;	Record keeping of flame presence in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(1).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(2) The Company shall keep copies of the Inspections of flare monitoring equipment;	Record keeping of inspections in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(2).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(3) The Company shall keep copies of the Flare velocity and landfill gas BTU content data;	Record keeping of gas velocity and heat content in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(3).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(4) The Company shall keep copies of RM 22 visible emissions observations.	Record keeping of RM 22 logs in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(4).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(5) The Company shall keep copies of A copy of RM 22.	Record keeping of RM 22 in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(5).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(ix)(H)(6) The Company shall keep copies of A statement of qualifications of personnel performing RM 22 and daily qualitative visible emissions observations.	Record keeping of personnel qualifications in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(6).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(7) The Company shall keep copies of the Calibration records for all flow meters;	Record keeping of flow meter calibration in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(7).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(8) The Company shall keep copies of the Landfill gas test information, including test protocol, raw data and final report; and	Record keeping of gas testing information in accordance with Condition 3 - Table 1 (b)(1)(ix)(H)(8).	NO	
2	Condition 3 - Table 1 (b)(1)(ix)(H)(9) The Company shall keep copies of All parts of the startup, shutdown and malfunction plan, including: The occurrence and duration of each startup, shutdown, or malfunction of operation; The occurrence and duration of each malfunction of the air pollution control and monitoring equipment; All required maintenance performed on the air pollution control and monitoring equipment; Actions taken during period of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the startup, shutdown, and malfunction plan; and All information necessary to demonstrate compliance with the startup, shutdown, and malfunction plan when actions are consistent with the plan.	Record keeping of SSMP occurrences in accordance with Condition 3 - Table 1 (b)(2)(ix)(H)(9).	NO	



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(x)(A) In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit to the Department semi-annual reports of all operational exceedances that contain the value and length of time for exceedance of parameters monitored under Condition 3– Table 1(b)(1)(vi).	Reporting of operational exceedances through semi-annual reports in accordance with Condition 3 - Table 1 (b)(1)(x)(A).	YES	Exceedances listed in Table 2, Operations Log shown in Attachment A
2	Condition 3 - Table 1 (b)(1)(x)(B) The owner/operator shall report actions within 2 working days, followed by a letter within 7 working days, following actions that are not consistent with the startup, shutdown, or malfunction plan.	Reporting actions inconsistent with SSMP in accordance with Condition 3 - Table 1 (b)(1)(x)(B).	YES	N/A
2	Condition 3 - Table 1 (b)(1)(xi)(A) In addition to that required by Condition 3(c)(3) of this permit, the owner/operator shall use RM22 of Appendix A 40 CFR Part 60 to determine compliance with the visible emissions provision of Condition 3 –Table 1(b)(1)(i).	Record keeping of visible emissions compliance in accordance with Condition 3 - Table 1 (b)(1)(xi)(A).	NO	
2	Condition 3 - Table 1 (b)(1)(xi)(B) In addition to that required by Condition 3(c)(3) of this permit, the owner/operator shall calculate the net heating value of the gas being combusted in the flare using the method specified in 40 CFR Part 60.18(f)(3).	Record keeping of gas net heating value in accordance with Condition 3 - Table 1 (b)(1)(xi)(B).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
2	Condition 3 - Table 1 (b)(1)(xi)(C) In addition to that required by Condition 3(c)(3) of this permit, the owner/operator shall demonstrate compliance with the emission limitations of Condition 3 – Table 1(b)(1)(ii) each month based on the amount of gas combusted, actual NMOC, H <sub>2</sub> S, and methane concentrations, approved emission factors and good engineering assumptions.	Record keeping of emissions in accordance with Condition 3 - Table 1 (b)(1)(xi)(C).	NO	
2	Condition 3 - Table 1 (b)(1)(xi)(D) In addition to that required by Condition 3(c)(3) of this permit, the owner/operator shall calculate emissions from the flare as identified by Condition 3-Table 1(b)(ix)(G) by the end of each month for the previous month.	Record keeping of emissions in accordance with Condition 3 - Table 1 (b)(1)(xi)(D).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(A) Operate the collection system such that gas is collected from each area, cell, or group of cells in the landfill in which the solid waste has been in place for a period of: 5 years or more if active; or 2 years or more if closed or at final grade.	Record keeping of waste age and gas collection in accordance with Condition 3 - Table 1 (c)(1)(iii)(A).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(B) Operate the collection system to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment.	Record keeping of collection system operation in accordance with Condition 3 - Table 1 (c)(1)(iii)(B).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(iii)(C) Operate the system such that all collected gases are vented to the gas treatment plant that processes the collected gas for subsequent sale or use and/or to permitted landfill gas flares that are designed and operated in accordance with §60.18	Record keeping of gas system operation in accordance with Condition 3 - Table 1 (c)(1)(iii)(C).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(D) Operate the control or treatment system at all times when the collected gas is routed to the system.	Record keeping of gas system operation in accordance with Condition 3 - Table 1 (c)(1)(iii)(D).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(E) In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.	Record keeping of gas system operation in accordance with Condition 3 - Table 1 (c)(1)(iii)(E).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(F) The provisions of this permit apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.	Record keeping of SSM events in accordance with Condition 3 - Table 1 (c)(1)(iii)(F).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(G) The owner/operator shall implement a program to monitor for cover integrity and implement cover repairs as per permit SW-16/07 dated 8/23/16 issued by the Solid and Hazardous Waste Management Branch, DNREC or as the permit is modified or renewed in future.	Monitoring of cover integrity in accordance with Condition 3 - Table 1 (c)(1)(iii)(G).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(iii)(H)(1) Operate the collection system with negative pressure at each wellhead except under the following conditions: A fire or increased well temperature; Use of geomembrane or synthetic cover, in which case the operator shall develop acceptable pressure limits in the design plan; or A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Department.	Record keeping of collection system pressure in accordance with Condition 3 - Table 1 (c)(1)(iii)(H)(1).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(H)(2) If a positive pressure exists, action shall be initiated by the Company to correct the exceedance within 5 calendar days, except for the three conditions allowed under paragraph H(1) above. If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.	Record keeping of pressure exceedances in accordance with Condition 3 - Table 1 (c)(1)(iii)(H)(2).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(iii)(I)(1) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Company may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. Approval of gas wellhead operating temperature increase will be evaluated case-by-case basis.	Monitoring of gas temperature, nitrogen level, and oxygen level in accordance with Condition 3 - Table 1 (c)(1)(iii)(I)(1).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(I)(2) If a well exceeds one of the operating parameters specified in Condition 3-Table 1 (c)(iii)(I)(1), action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance.	Record keeping of gas temperature, nitrogen level, or oxygen level exceedances in accordance with Condition 3 - Table 1 (c)(1)(iii)(I)(2).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(I)(3) Any attempted corrective measure shall not cause exceedances of other operational or performance standards.	Record keeping of corrective measures in accordance with Condition 3 - Table 1 (c)(1)(iii)(I)(3).	NO	
3	Condition 3 - Table 1 (c)(1)(iii)(I)(4) If corrective actions are taken as specified in paragraph(B) above, the monitored exceedance is not a violation of the operational requirements in this section.	Record keeping of corrective measures in accordance with Condition 3 - Table 1 (c)(1)(iii)(I)(4).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(iii)(J) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.	Record keeping of surface emissions in accordance with Condition 3 - Table 1 (c)(1)(iii)(J).	NO	
3	Condition 3 - Table 1 (c)(1)(iv) All landfill gas monitoring shall be performed by trained personnel.	Record keeping of personnel training in accordance with Condition 3 - Table 1 (c)(1)(iv).	NO	
3	Condition 3 - Table 1 (c)(1)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping and monitoring in accordance with Condition 3 - Table 1 (c)(1)(v).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(A) The owner/operator shall measure gauge pressure in the gas collection header at each individual well, monthly.	Monitoring system pressure in accordance with Condition 3 - Table 1 (c)(1)(vi)(A).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(vi)(B) The owner/operator shall monitor each well for temperature and nitrogen or oxygen, monthly.	Monitoring system temperature and nitrogen or oxygen in accordance with Condition 3 - Table 1 (c)(1)(vi)(B).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(C) The owner/operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a serpentine pattern spaced 30 meters apart (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 60.755(d).	Monitoring surface methane emissions in accordance with Condition 3 - Table 1 (c)(1)(vi)(C).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(C)(1) Monitoring shall also be performed where visual observations, such as distressed vegetation and cracks or seeps in the cover, indicate elevated concentrations of landfill gas.	Monitoring surface emissions in accordance with Condition 3 - Table 1 (c)(1)(vi)(C)(1).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(C)(2) Areas with steep or otherwise dangerous areas may be excluded from the surface testing.	Monitoring surface emissions in accordance with Condition 3 - Table 1 (c)(1)(vi)(C)(2).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(C)(3) All penetrations of the landfill cover.	Monitoring surface emissions in accordance with Condition 3 - Table 1 (c)(1)(vi)(C)(3).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(D) Determine the background concentration by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.	Monitoring surface emissions in accordance with Condition 3 - Table 1 (c)(1)(vi)(D).	NO	



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(vi)(E) Develop a surface monitoring plan for methane that includes: A topographical map with the monitoring route identified and spaced at 30 meter intervals; The rational for any site-specific deviations from the 30 meter intervals; and All penetrations of the landfill cover.	Creating surface monitoring plan in accordance with Condition 3 - Table 1 (c)(1)(vi)(E).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(F) Implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.	Monitoring cover integrity in accordance with Condition 3 - Table 1 (c)(1)(vi)(F).	NO	
3	Condition 3 - Table 1 (c)(1)(vi)(G) Monitor training records for all personnel performing landfill gas monitoring and update records as needed.	Monitoring training records in accordance with Condition 3 - Table 1 (c)(1)(vi)(G).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(A) Perform surface emission monitoring in accordance with section 'individual source survey' of Method 21 of 40 CFR Part 60, Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.	Monitoring surface emissions in accordance with Condition 3 - Table 1 (c)(1)(vii)(A).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(B) The portable analyzer shall meet the instrument specifications provided in section "apparatus" of Method 21 of 40 CFR Part 60, Appendix A, except that "methane" shall replace all references to VOC.	Record keeping of analyzer specifications in accordance with Condition 3 - Table 1 (c)(1)(vii)(B).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(C) The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.	Record keeping of calibration gas in accordance with Condition 3 - Table 1 (c)(1)(vii)(C).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(vii)(D) Follow 'performance evaluation requirements' and 'instrument evaluation procedures' of Method 21 of 40 CFR Part 60, Appendix A.	Record keeping of evaluations in accordance with Condition 3 - Table 1 (c)(1)(vii)(D).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(E) The calibration procedures provided in Method 21 of Appendix A shall be followed immediately before commencing a surface monitoring survey.	Record keeping of calibration procedures in accordance with Condition 3 - Table 1 (c)(1)(vii)(E).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(F) The nitrogen level shall be determined using Method 3C of 40 CFR Part 60, Appendix A.	Monitoring nitrogen level in accordance with Condition 3 - Table 1 (c)(1)(vii)(F).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(G) The oxygen level shall be determined by an oxygen meter using Method 3A of 40 CFR Part 60, Appendix A except that:	Monitoring of oxygen level in accordance with Condition 3 - Table 1 (c)(1)(vii)(G).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(G)(1) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span.	Monitoring of oxygen level in accordance with Condition 3 - Table 1 (c)(1)(vii)(G)(1).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(G)(2) A data recorder is not required.	Monitoring of oxygen level in accordance with Condition 3 - Table 1 (c)(1)(vii)(G)(2).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(G)(3) Only two calibration gases are required, a zero and a span, and ambient air may be used as the span.	Monitoring of oxygen level in accordance with Condition 3 - Table 1 (c)(1)(vii)(G)(3).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(G)(4) A calibration error check is not required.	Monitoring of oxygen level in accordance with Condition 3 - Table 1 (c)(1)(vii)(G)(4).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(G)(5) The allowable sample bias, zero drift, and calibration drift are plus/minus 10 percent.	Monitoring of oxygen level in accordance with Condition 3 - Table 1 (c)(1)(vii)(G)(5).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(vii)(H) The NMOC emission rate shall be calculated using the appropriate equation provided in 40 CFR Part 60.754(a).	Record keeping of NMOC calculations in accordance with Condition 3 - Table 1 (c)(1)(vii)(H).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(I) Each month, the owner or operator shall sample the landfill gas using Department approved test methods to determine methane and H <sub>2</sub> S content. A dräger tube (or equivalent) test can be accepted for monthly determination of H <sub>2</sub> S in landfill gas along with a quarterly test by ASTM D5504 or EPA method 15/16. The owner or operator shall take measure to complete a quarterly test, and provide time for a repeat test within that quarter if necessary.	Monitoring methane and H <sub>2</sub> S content in accordance with Condition 3 - Table 1 (c)(1)(vii)(I).	NO	
3	Condition 3 - Table 1 (c)(1)(vii)(J) Each quarter, the owner or operator shall sample the landfill gas using Department approved test methods to determine NMOC content. EPA Method 25c can be used as the Department approved test method.	Monitoring NMOC content in accordance with Condition 3 - Table 1 (c)(1)(vii)(J).	NO	
3	Condition 3 - Table 1 (c)(1)(viii) Training shall include but not be limited to such things as sampling methods, instrument calibration, instrument response time, instrument response factors, and calibration gases.	Record keeping of personnel training in accordance with Condition 3 - Table 1 (c)(1)(viii).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(ix)(A) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.	Record keeping of landfill capacity data in accordance with Condition 3 - Table 1 (c)(1)(ix)(A).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(B) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall keep readily accessible records for the life of the control equipment of the data listed in the following as measured during the initial performance test or compliance determination.	Record keeping of gas system data in accordance with Condition 3 - Table 1 (c)(1)(ix)(B).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(B)(1) The maximum expected gas generation flow rate as calculated in §60.755(a)(1).	Record keeping of maximum calculated gas flow rate in accordance with Condition 3 - Table 1 (c)(1)(ix)(B)(1).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(B)(2) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR Part §60.759(a)(1).	Record keeping of gas extraction devices in accordance with Condition 3 - Table 1 (c)(1)(ix)(B)(2).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(ix)(B)(3) The flare type (i.e., steam assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent.	Record keeping of flare type and data in accordance with Condition 3 - Table 1 (c)(1)(ix)(B)(3).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(C) Keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Conditions 3 –Table 1(c)(1)(iii) & (vi) as well as up-to-date, readily accessible records for periods during which the parameter boundaries established during the most recent performance test are exceeded.	Record keeping of operating parameters in accordance with Condition 3 - Table 1 (c)(1)(ix)(C).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(D) Keep up-to-date, readily accessible continuous records of the indication of flow to the control device or indication of bypass flow.	Record keeping of flow control in accordance with Condition 3 - Table 1 (c)(1)(ix)(D).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(E) Records of subsequent tests or monitoring including monitoring of H <sub>2</sub> S concentration in landfill gas shall be maintained for a minimum of 5 years.	Record keeping of tests and monitoring in accordance with Condition 3 - Table 1 (c)(1)(ix)(E).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(F) Records of the control device vendor specifications shall be maintained until removal.	Record keeping of vendor specifications in accordance with Condition 3 - Table 1 (c)(1)(ix)(F).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(ix)(G) Keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and provide a unique identification location label for each collector.	Record keeping of plot map in accordance with Condition 3 - Table 1 (c)(1)(ix)(G).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(H) Keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors.	Record keeping of collector installation date and location in accordance with Condition 3 - Table 1 (c)(1)(ix)(H).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(I) Keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as well as any nonproductive areas excluded from collection.	Record keeping of asbestos-containing and nondegradable waste in accordance with Condition 3 - Table 1 (c)(1)(ix)(I).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(J) Keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards, the reading in the subsequent month whether or not the second reading is an exceedance, the location of each exceedance and any corrective actions taken on monitored exceedances.	Record keeping of collection and control system exceedances in accordance with Condition 3 - Table 1 (c)(1)(ix)(J).	NO	
3	Condition 3 - Table 1 (c)(1)(ix)(K) Record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports.	Record keeping of positive pressure in accordance with Condition 3 - Table 1 (c)(1)(ix)(K).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(ix)(L) The operational standards and limitations monitored in accordance with Conditions 3 - Table 1(c)(1)(iii) & (iv).	Record keeping of the operational standards and limitations monitored in accordance with Conditions 3 - Table 1 (c)(1)(iii) & (iv). in accordance with Condition 3 - Table 1 (c)(1)(ix)(L).	NO	
3	Condition 3 - Table 1 (c)(1)(x)(A) An amended design capacity report when there is an increase in the design capacity of the landfill, whether the increase results from an increase in the area or depth of the landfill, a change in the operating procedures of the landfill, or any other means. The amended design capacity report shall be submitted within 90 days of the issuance of an amended construction or operating permit, or the placement of waste in additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever occurs first.	Reporting of amended design capacity in accordance with Condition 3 - Table 1 (c)(1)(x)(A).	YES	N/A
3	Condition 3 - Table 1 (c)(1)(x)(B) The owner/operator shall submit to the Department compliance reports every 6 months (semi-annually) as specified in 40 CFR Parts 63.1980(a) and (b), and Condition 3-Table 1(c)(4)(x) including information on all deviations as defined in 40 CFR Part 63.1990 that occurred during the 6-month reporting period. The semi-annual reports are due by February 1 and August 1 of each calendar year.	Reporting of compliance in accordance with Condition 3 - Table 1 (c)(1)(x)(B).	YES	Report dated January 29, 2018 and This Report



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(x)(C) In addition to the information outlined in MACT requirement of this section, the owner/operator shall submit to the Department semi-annual reports of the recorded information in (1) through (6) below:	Reporting in accordance with Condition 3 - Table 1 (c)(1)(x)(C).	YES	Report dated January 29, 2018 and This Report
3	Condition 3 - Table 1 (c)(1)(x)(C)(1) Value and length of time for exceedance of applicable parameters monitored under Condition 3-Table 1(c)(1)(vi), and (c)(2)(vi).	Reporting of value and length of exceedances in accordance with Condition 3 - Table 1 (c)(1)(x)(C)(1).	YES	Attachment B, C and D
3	Condition 3 - Table 1 (c)(1)(x)(C)(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow.	Reporting of gas bypass in accordance with Condition 3 - Table 1 (c)(1)(x)(C)(2).	YES	Attachment A
3	Condition 3 - Table 1 (c)(1)(x)(C)(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.	Reporting of control device down time in accordance with Condition 3 - Table 1 (c)(1)(x)(C)(3).	YES	Attachment A
3	Condition 3 - Table 1 (c)(1)(x)(C)(4) All periods when the collection system was not operating in excess of 5 days.	Reporting of collection system down time in accordance with Condition 3 - Table 1 (c)(1)(x)(C)(4).	YES	N/A
3	Condition 3 - Table 1 (c)(1)(x)(C)(5) The location of each exceedance of the 500 parts per million methane concentration and the concentration recorded at each location for which an exceedance was recorded in the previous quarter.	Reporting of surface monitoring exceedances in accordance with Condition 3 - Table 1 (c)(1)(x)(C)(5).	YES	Attachment D

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(x)(C)(6) The date of installation and the location of each well or collection system expansion added along with new plot maps that indicate the locations of all new equipment.	Reporting of well location and installation in accordance with Condition 3 - Table 1 (c)(1)(x)(C)(6).	YES	Attachment E
3	Condition 3 - Table 1 (c)(1)(x)(D) The owner/operator shall submit an NMOC emission rate report to the Department annually, except as provided for in paragraph (3) below. The Department may request such additional information as may be necessary to verify the reported NMOC emission rate.	Reporting of NMOC emission rate in accordance with Condition 3 - Table 1 (c)(1)(x)(D).	YES	April 25, 2018
3	Condition 3 - Table 1 (c)(1)(x)(D)(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.754 (a) or (b), as applicable.	Reporting of NMOC emission rate in accordance with Condition 3 - Table 1 (c)(1)(x)(D)(1).	YES	N/A
3	Condition 3 - Table 1 (c)(1)(x)(D)(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.	Reporting of NMOC emission rate in accordance with Condition 3 - Table 1 (c)(1)(x)(D)(2).	YES	N/A
3	Condition 3 - Table 1 (c)(1)(x)(D)(3) The Company subject to the requirements of this subpart is exempted from the requirements of paragraphs 1 and 2 of this section, after the installation of a collection and control system in compliance with Condition 3-Table 1(a), (c), (d) and (e), during such time as the collection and control system is in operation and in compliance with Condition 3 -Table 1(a), (c), (d), and (e).	Reporting of NMOC emission rate in accordance with Condition 3 - Table 1 (c)(1)(x)(D)(3).	YES	N/A

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(x)(E) The owner/operator shall submit the quarterly H <sub>2</sub> S concentration in LFG analysis results identified by Condition 3 - Table 1 (c)(1)(vii)(I) by the end of the each quarter for the previous quarter.	Reporting in accordance with Condition 3 - Table 1 (c)(1)(x)(E)	YES	January 23, April 2, and June 11, 2018
3	Condition 3 - Table 1 (c)(1)(xi)(A) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with Condition 3- Table 1(c)(1)(iii)(B), the appropriate equation from 40 CFR Part 60.755(a)(1) shall be used. The k and L <sub>0</sub> kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Department. If k has been determined as specified in 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.	Record keeping of gas flow rate calculation in accordance with Condition 3 - Table 1 (c)(1)(xi)(A).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(B) If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under Condition 3-Table 1(c)(1)(iii)(I).	Record keeping of positive pressure corrective action in accordance with Condition 3 - Table 1 (c)(1)(xi)(B).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(xi)(C) If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measurement shall not cause exceedances of other operational or performance standards.	Record keeping of gas system expansion in accordance with Condition 3 - Table 1 (c)(1)(xi)(C).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(D) Installation of additional wells is not required during the first 180 days after gas collection system start-up.	Record keeping of new wells in accordance with Condition 3 - Table 1 (c)(1)(xi)(D).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(E) If a well exceeds one of the operating parameters of Condition 3-Table 1(c)(1)(iii)(I), action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measurement shall not cause exceedances of other operational or performance standards.	Record keeping of corrective action in accordance with Condition 3 - Table 1 (c)(1)(xi)(E).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(F) Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the following actions shall be taken. As long as the following specified actions are taken, the exceedance is not a violation of the operational requirements.	Record keeping of surface monitoring exceedances in accordance with Condition 3 - Table 1 (c)(1)(xi)(F).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(xi)(F)(1) The location of each monitored exceedance shall be marked and the location recorded.	Record keeping of exceedance location in accordance with Condition 3 - Table 1 (c)(1)(xi)(F)(1).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(F)(2) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.	Record keeping of corrective actions in accordance with Condition 3 - Table 1 (c)(1)(xi)(F)(2).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(F)(3) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in Condition 3 – Table 1(c)(1)(xi)(F)(5) shall be taken, and no further monitoring of that location is required until the action specified in Condition 3 – Table 1(c)(1)(xi)(F)(5) has been taken.	Record keeping of remonitoring results in accordance with Condition 3 - Table 1 (c)(1)(xi)(F)(3).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(1)(xi)(F)(4) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in Condition 3 – Table 1(c)(1)(xi)(F)(3) or (5) shall be taken.	Record keeping of remonitoring in accordance with Condition 3 - Table 1 (c)(1)(xi)(F)(4).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(F)(5) For any location where monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Department for approval.	Record keeping of remonitoring results in accordance with Condition 3 - Table 1 (c)(1)(xi)(F)(5).	NO	
3	Condition 3 - Table 1 (c)(1)(xi)(G) Compliance with all standards and limitations of Condition 3 – Table 1(c)(1)(iii) and (iv) shall be based upon record keeping.	Record keeping of compliance in accordance with Condition 3 - Table 1 (c)(1)(xi)(G).	NO	
3	Condition 3 - Table 1 (c)(2)(iv)(A) The wellhead valve(s) shall be closed.	Monitoring wellhead valves in accordance with Condition 3 - Table 1 (c)(2)(iv)(A).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(2)(iv)(B) The remaining gas collection system shall be rebalanced and checked during the remainder of the current month and the following two months after valve closure to allow the collection system to adapt without the contribution of the decommissioned well(s).	Monitoring and record keeping of gas collection system rebalancing in accordance with Condition 3 - Table 1 (c)(2)(iv)(B).	NO	
3	Condition 3 - Table 1 (c)(2)(iv)(C) After DNREC review of data and upon written approval from the Department for final abandonment, remove wellhead(s), cut and cap the vacuum line and gas well casing a minimum of three (3) feet below ground, backfill with soil as appropriate, and repair cap. The initial approval for well decommissioning from the Division of Air Quality does not preclude any requirements by the Department's Solid and Hazardous Waste Management Branch (SHWMB).	Record keeping of gas well removal in accordance with Condition 3 - Table 1 (c)(2)(iv)(C).	NO	
3	Condition 3 - Table 1 (c)(2)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping of compliance in accordance with Condition 3 - Table 1 (c)(2)(v).	NO	
3	Condition 3 - Table 1 (c)(2)(vi)(A) The owner/operator shall monitor the average weekly flow rate of landfill gas collected at the flare/gas station for three (3) months after the well(s) decommissioning and compare with the three (3) months prior to well(s) decommissioning to determine if gas collection has increased, decreased or remained constant as a result of the decommissioning of the extraction points.	Monitoring of collected flow rate in accordance with Condition 3 - Table 1 (c)(2)(vi)(A).	NO	



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(2)(vi)(B) The Company shall conduct monthly surface monitoring in the vicinity of the decommissioned well(s) for three (3) consecutive months after initial well decommissioning to determine if additional wells are needed to control fugitive gas emissions or if the decommissioned well(s) need to be returned to service.	Monitoring of surface emissions in accordance with Condition 3 - Table 1 (c)(2)(vi)(B).	NO	
3	Condition 3 - Table 1 (c)(2)(vii) That required by Condition 3(b)(1)(ii) of this permit.	Testing in accordance with Condition 3 - Table 1 (c)(2)(vii).	NO	
3	Condition 3 - Table 1 (c)(2)(ix) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the monitoring required by Condition 3- Table 1(c)(2)(vi).	Record keeping of monitored data in accordance with Condition 3 - Table 1 (c)(2)(ix).	NO	
3	Condition 3 - Table 1 (c)(2)(x)(A) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall provide the Department with written notification at least 15 days prior to beginning well decommissioning that includes the following:	Reporting well decommissioning data in accordance with Condition 3 - Table 1 (c)(2)(x)(A).	YES	April 3 and April 11, 2018
3	Condition 3 - Table 1 (c)(2)(x)(A)(1) The reason for well decommissioning.	Reporting reason for decommissioning in accordance with Condition 3 - Table 1 (c)(2)(x)(A)(1).	YES	April 3 and April 11, 2018
3	Condition 3 - Table 1 (c)(2)(x)(A)(2) A plot map that clearly identifies all nearby active wells and the wells to be decommissioned.	Reporting of well location in accordance with Condition 3 - Table 1 (c)(2)(x)(A)(2).	YES	April 3 and April 11, 2018

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(2)(x)(A)(3) Estimated approximate radius of influence (ROI) of the well to be decommissioned and the ROIs of the nearby active wells or LFG collection trenches.	Reporting of radius of influence in accordance with Condition 3 - Table 1 (c)(2)(x)(A)(3).	YES	April 3 and April 11, 2018
3	Condition 3 - Table 1 (c)(2)(x)(A)(4) Documentation that demonstrates that the wells have been unproductive.	Reporting of documented unproductive wells in accordance with Condition 3 -Table 1 (c)(2)(x)(A)(4).	YES	April 3 and April 11, 2018
3	Condition 3 - Table 1 (c)(2)(x)(B) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall provide a summary report of the results and details of the plans to abandon the decommissioned well(s) to the Department for approval prior to formal abandonment.	Reporting of well abandonment plan in accordance with Condition 3 - Table 1 (c)(2)(x)(B).	YES	January 9, April 18, May 29, June 15, and June 22, 2018
3	Condition 3 - Table 1 (c)(2)(x)(C) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall provide a summary report of landfill gas flow rate and surface emissions monitoring outlined by Condition 3- Table 1(c)(2)(vi)(A)&(B).	Reporting of gas flow rate and emissions monitoring in accordance with Condition 3 - Table 1 (c)(2)(x)(C).	YES	January 9, April 18, May 29, June 15, and June 22, 2018
3	Condition 3 - Table 1 (c)(2)(xi) In addition to that required by Condition 3(c)(3) of this permit, compliance shall be demonstrated by record keeping and reporting.	Record keeping and reporting of compliance in accordance with Condition 3 - Table 1 (c)(2)(xi).	NO	
3	Condition 3 - Table 1 (c)(3)(iii)(A) The collection and control system may be capped or removed provided that all the following conditions are met:	Record keeping of collection systems capping or removal in accordance with Condition 3 - Table 1 (c)(3)(iii)(A).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(3)(iii)(A)(1) The landfill shall be no longer accepting solid waste and be permanently closed;	Record keeping of accepted waste in accordance with Condition 3 - Table 1 (c)(3)(iii)(A)(1).	NO	
3	Condition 3 - Table 1 (c)(3)(iii)(A)(2) The collection and control system shall have been in a minimum of 15 years; and	Record keeping of collection system operation time in accordance with Condition 3 - Table 1 (c)(3)(iii)(A)(2).	NO	
3	Condition 3 - Table 1 (c)(3)(iii)(A)(3) The calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.	Record keeping of NMOC gas produced in accordance with Condition 3 - Table 1 (c)(3)(iii)(A)(3).	NO	
3	Condition 3 - Table 1 (c)(3)(iii)(B) If a closure report has been submitted to the Department, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR Part 60.7(a)(4) provided that none of the conditions of this permit are violated.	Record keeping of waste acceptance in accordance with Condition 3 - Table 1 (c)(3)(iii)(B).	NO	
3	Condition 3 - Table 1 (c)(3)(iii)(C) Any closed landfill that has no monitored exceedances in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane readings of 500 parts per million or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.	Record keeping of monitored exceedances in accordance with Condition 3 - Table 1 (c)(3)(iii)(C).	NO	
3	Condition 3 - Table 1 (c)(3)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping of compliance in accordance with Condition 3 -Table 1 (c)(3)(v).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(3)(vi) The company shall monitor the operational standards of Condition 3–Table 1(c)(3)(iii).	Monitoring of operational standards in accordance with Condition 3 - Table 1 (c)(3)(vi).	NO	
3	Condition 3 - Table 1 (c)(3)(vii) In addition to that required by Condition 3(b)(1)(ii) of this permit, the owner/operator shall calculate the NMOC emission rate using the equation provided in 40 CFR Part 60.754(b).	Record keeping of NMOC emissions calculations in accordance with Condition 3 - Table 1 (c)(3)(vii).	NO	
3	Condition 3 - Table 1 (c)(3)(ix) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall keep records of the monitoring required by Condition 3–Table 1(c)(3)(vi).	Record keeping of monitored data in accordance with Condition 3 - Table 1 (c)(3)(ix).	NO	
3	Condition 3 - Table 1 (c)(3)(x)(A) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit a closure report to the Department within 30 days of waste acceptance cessation. The Department may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of Section 258.60 of 40 CFR Part 60.	Reporting of landfill closure in accordance with Condition 3 - Table 1 (c)(3)(x)(A).	YES	N/A
3	Condition 3 - Table 1 (c)(3)(x)(B) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit an equipment removal report to the Department 30 days prior to removal or cessation of of the control equipment that includes the following:	Reporting of equipment removal in accordance with Condition 3 - Table 1 (c)(3)(x)(B).	YES	N/A

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(3)(x)(B)(1) A copy of the closure report submitted in accordance with Condition 3-Table 1(c)(3)(x)(A);	Reporting of closure in accordance with Condition 3 - Table 1 (c)(3)(x)(B)(1).	YES	N/A
3	Condition 3 - Table 1 (c)(3)(x)(B)(2) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired, and	Reporting of initial performance test in accordance with Condition 3 - Table 1 (c)(3)(x)(B)(2).	YES	N/A
3	Condition 3 - Table 1 (c)(3)(x)(B)(3) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.	Reporting of NMOC emission rates in accordance with Condition 3 - Table 1 (c)(3)(x)(B)(3).	YES	N/A
3	Condition 3 - Table 1 (c)(3)(xi) In addition to that required by Condition 3(c)(3) of this permit, compliance with the operational standards shall be based upon record keeping.	Record keeping of compliance with operational standards in accordance with Condition 3 - Table 1 (c)(3)(xi).	NO	
3	Condition 3 - Table 1 (c)(4)(iii) The owner/operator shall develop and implement a written startup, shutdown and malfunction plan (SSM) that describes, in detail, procedures for operating and maintaining the collection and control system and the continuous monitoring system during periods of SSM and a program of corrective action for malfunctioning process and air pollution control equipment according to the provisions of 40 CFR Part 63.6(e)(3).	Record keeping of SSM Plan in accordance with Condition 3 - Table 1 (c)(4)(iii).	NO	
3	Condition 3 - Table 1 (c)(4)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping of compliance in accordance with Condition 3 - Table 1 (c)(4)(v).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(4)(vi) In addition to the requirements of all monitoring conditions specified under Condition 3-Table 1(c), the Company shall monitor the time, date, and length of all SSM and any actions taken at such times.	Monitoring of SSM events in accordance with Condition 3 - Table 1 (c)(4)(vi).	NO	
3	Condition 3 - Table 1 (c)(4)(ix)(A) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall keep the written Startup Shutdown and Malfunction Plan (SSM Plan) on record to be made available for inspection upon request, for the life of the affected source.	Record keeping of SSM Plan in accordance with Condition 3 - Table 1 (c)(4)(ix)(A).	NO	
3	Condition 3 - Table 1 (c)(4)(ix)(B) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall keep previous versions of the SSM Plan on record if the SSM Plan is revised, for a period of 5 years after each revision to the plan.	Record keeping of previous SSM Plans in accordance with Condition 3 - Table 1 (c)(4)(ix)(B).	NO	
3	Condition 3 - Table 1 (c)(4)(ix)(C) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the occurrence and duration of each SSM of operation, and of the air pollution control equipment.	Record keeping of each SSM event in accordance with Condition 3 - Table 1 (c)(4)(ix)(C).	NO	
3	Condition 3 - Table 1 (c)(4)(ix)(D) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall record all maintenance performed on the air pollution control equipment.	Record keeping of equipment maintenance in accordance with Condition 3 - Table 1 (c)(4)(ix)(D).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(4)(ix)(E) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall record actions taken during periods of SSM (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the SSM Plan.	Record keeping of actions taken during SSM periods in accordance with Condition 3 - Table 1 (c)(4)(ix)(E).	NO	
3	Condition 3 - Table 1 (c)(4)(ix)(F) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain all information necessary to demonstrate conformance with the affected source's SSM Plan when all actions taken during periods of SSM are consistent with the procedures specified in such plan.	Record keeping of conformance with SSM Plan in accordance with Condition 3 - Table 1 (c)(4)(ix)(F).	NO	
3	Condition 3 - Table 1 (c)(4)(ix)(G) In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of the permit, the Company shall record each period during which a CMS is malfunctioning or inoperative.	Record keeping of CMS malfunctions in accordance with Condition 3 - Table 1 (c)(4)(ix)(G).	NO	
3	Condition 3 - Table 1 (c)(4)(x)(A) In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit to the Department the following reports: A SSM report shall be submitted semiannually.	Reporting of SSM compliance in accordance with Condition 3 - Table 1 (c)(4)(x)(A).	YES	January 23, 2018 and July 25, 2018

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(4)(x)(B) In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit to the Department the following reports: If actions taken during a SSM are consistent with the procedures specified in the SSM Plan, the owner or operator shall state such information in the report.	Reporting of actions consistent with SSM Plan in accordance with Condition 3 - Table 1 (c)(4)(x)(B).	YES	January 23, 2018 and July 25, 2018
3	Condition 3 - Table 1 (c)(4)(x)(C) In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit to the Department the following reports: The SSM report shall consist of a letter, containing the name, title, and signature of the responsible official certifying to its accuracy.	Reporting of SSM report accuracy in accordance with Condition 3 - Table 1 (c)(4)(x)(C).	YES	January 23, 2018 and July 25, 2018
3	Condition 3 - Table 1 (c)(4)(x)(D) In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit to the Department the following reports: SSM reports shall be delivered or postmarked by the 30th day following the end of each calendar half.	Reporting of SSM on time in accordance with Condition 3 - Table 1 (c)(4)(x)(D).	YES	January 23, 2018 and July 25, 2018



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
3	Condition 3 - Table 1 (c)(4)(x)(E) In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit to the Department the following reports: Anytime an action taken by an owner/operator during a SSM is not consistent with the procedures specified in the SSM plan, the owner/operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event.	Reporting of actions inconsistent with SSM Plan in accordance with Condition 3 - Table 1 (c)(4)(x)(E).	YES	January 23, 2018 and July 25, 2018
3	Condition 3 - Table 1 (c)(4)(x)(E)(1) The immediate report shall consist of a telephone call or facsimile transmission within 2 working days after commencing actions.	Reporting of actions inconsistent with SSM Plan in accordance with Condition 3 - Table 1 (c)(4)(x)(E)(1).	YES	N/A
3	Condition 3 - Table 1 (c)(4)(x)(E)(2) The letter shall contain the name, title and signature of the responsible official certifying its accuracy, explaining the circumstances of the event, the reasons for not following the SSM plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.	Reporting of actions inconsistent with SSM Plan in accordance with Condition 3 - Table 1 (c)(4)(x)(E)(2).	YES	N/A
3	Condition 3 - Table 1 (c)(4)(xi) In addition to that required by Condition 3(c)(3) of this permit, compliance with the operational standards shall be based upon record keeping and reporting requirements outlined above.	Record keeping and reporting of compliance in accordance with Condition 3 - Table 1 (c)(4)(xi).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
4	Condition 3 - Table 1 (d)(1)(i) The gas plant shall not be a source of emissions.	Record keeping and monitoring of gas plant in accordance with Condition 3 - Table 1 (d)(1)(i).	NO	
4	Condition 3 - Table 1 (d)(1)(iv)(A)(1) Route all the collected gas to: the gas compression plant that processes the collected gas for subsequent sale or, use; or	Record keeping of gas routing in accordance with Condition 3 - Table 1 (d)(1)(iv)(A)(1).	NO	
4	Condition 3 - Table 1 (d)(1)(iv)(A)(2) Permitted flare(s) designed and operated in accordance with §60.18(c).	Record keeping of gas routing in accordance with Condition 3 - Table 1 (d)(1)(iv)(A)(2).	NO	
4	Condition 3 - Table 1 (d)(1)(iv)(B)(1) The gas plant shall: be operated at all times when the collected gas is routed to the system.	Record keeping of gas plant operation in accordance with Condition 3 - Table 1 (d)(1)(iv)(B)(1).	NO	
4	Condition 3 - Table 1 (d)(1)(iv)(B)(2) be maintained and operated in a manner consistent with the specifications in the operation manual. Any changes to the manuals shall be submitted to the Department.	Record keeping of operation and maintenance in accordance with Condition 3 - Table 1 (d)(1)(iv)(B)(2).	NO	
4	Condition 3 - Table 1 (d)(1)(iv)(C) DSWA shall upgrade the landfill gas collection system, including gas lines, process skid, and compressor so it is capable of processing and transmitting processed landfill gas at the rate of 9,000 scfm. When the landfill gas flow rate exceeds a daily average of 8,000 scfm for two (2) consecutive months, DSWA shall upgrade the system so it is capable of processing and transmitting processed landfill gas at the rate of 12,000 scfm. In any event, all landfill gas collected at the landfill either shall be processed by the gas compressor system or burned at a flare.	Record keeping of gas system upgrades in accordance with Condition 3 - Table 1 (d)(1)(iv)(C).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
4	Condition 3 - Table 1 (d)(1)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping of compliance in accordance with Condition 3 - Table 1 (d)(1)(v).	NO	
4	Condition 3 - Table 1 (d)(1)(vi) The owner/operator shall monitor operational limitations of this section.	Monitoring of operational limitations in accordance with Condition 3 - Table 1 (d)(1)(vi).	NO	
4	Condition 3 - Table 1 (d)(1)(ix)(A) The owner/operator shall maintain all records specified under Condition 3-Table 1(d)(1)(vi) including the following information:	Record keeping in accordance with Condition 3 - Table 1 (d)(1)(ix)(A).	NO	
4	Condition 3 - Table 1 (d)(1)(ix)(A)(1) The date and time the gas plant was shut down;	Record keeping of gas plant shut downs in accordance with Condition 3 - Table 1 (d)(1)(ix)(A)(1).	NO	
4	Condition 3 - Table 1 (d)(1)(ix)(A)(2) The date and time the gas flow was restored to the plant.	Record keeping of gas flow to gas plant in accordance with Condition 3 - Table 1 (d)(1)(ix)(A)(2).	NO	
4	Condition 3 - Table 1 (d)(1)(ix)(A)(3) The date and time the flare was fired; and	Record keeping of flare use in accordance with Condition 3 - Table 1 (d)(1)(ix)(A)(3).	NO	
4	Condition 3 - Table 1 (d)(1)(ix)(B) Records of the control device vendor specifications shall be maintained until removal.	Record keeping of vendor specifications in accordance with Condition 3 - Table 1 (d)(1)(ix)(B).	NO	
4	Condition 3 - Table 1 (d)(1)(ix)(C) The daily exit gas flow rate from gas plant as specified in Condition 3-Table 1 (d)(1)(iv)(A).	Record keeping of exit gas flow rate in accordance with Condition 3 - Table 1 (d)(1)(ix)(C).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
4	Condition 3 - Table 1 (d)(1)(x)(A) Any changes to the operational manual shall be submitted to the Department within one (1) month.	Reporting of changes to the operational manual in accordance with Condition 3 - Table 1 (d)(1)(x)(A).	YES	N/A
4	Condition 3 - Table 1 (d)(1)(x)(B) In addition to Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall submit to the Department annual reports of the following information:	Reporting in accordance with Condition 3 - Table 1 (d)(1)(x)(B).	YES	Attachment A
4	Condition 3 - Table 1 (d)(1)(x)(B)(1) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR Part 60.756.	Reporting of gas routing in accordance with Condition 3 - Table 1 (d)(1)(x)(B)(1).	YES	Attachment A
4	Condition 3 - Table 1 (d)(1)(x)(B)(2) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour during normal operating hours and 4 hours outside normal operating hours, and length of time the control device was not operating.	Reporting of control device down time in accordance with Condition 3 - Table 1 (d)(1)(x)(B)(2).	YES	Attachment A
4	Condition 3 - Table 1 (d)(1)(xi) In addition to that required by Condition 3(c)(3) of this permit, compliance will be determined based on records keeping and reporting requirements of this section.	Record keeping and reporting in accordance with Condition 3 - Table 1 (d)(1)(xi).	NO	
5	Condition 3 - Table 1 (e)(1)(i) The generator shall be operated in conformance with the generator manufacturer's instructions, such as following maintenance and operating requirements to help minimize emissions.	Record keeping of operations in accordance with Condition 3 - Table 1 (e)(1)(i).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
5	Condition 3 - Table 1 (e)(1)(iii)(A) The emergency generator may be operated for an unlimited number of hours during an emergency as described in Condition 3-Table 1(e)(1)(iii)(C).	Record keeping of hours of operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(A).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(B) The emergency generator may operate for 100 hours per calendar year during testing or for maintenance purposes, pursuant to the definition of an emergency generator as defined in the 7 DE Admin Code 1144, except as restricted by Condition 3-Table 1(e)(1)(iii)(D).	Record keeping of hours of operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(B).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(C) The emergency generator may only operate during an emergency as defined below:	Record keeping of hours of operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(C).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(C)(1) An electrical power outage due to: a failure of the electrical grid; on-site disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions (e.g. hurricane, tornado, blizzard, etc.); or	Record keeping of hours of emergency operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(C)(1).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(C)(2) When there is a deviation of voltage or frequency from the electrical provider to the premises of three percent (3%) or greater above, or five Percent (5%) or greater below, standard voltage or frequency.	Record keeping of hours of emergency operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(C)(2).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
5	Condition 3 - Table 1 (e)(1)(iii)(D) No emergency generator shall be used during testing or for maintenance purposes before 5 p.m. on a day which has a Ground Level Ozone Pollution Forecast or Particle Pollution Forecast of "Code Red" or "Code Orange" as announced by the Department.	Record keeping of hours of operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(D).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(E) Despite Condition 3-Table 1(e)(1)(iii)(D), an emergency generator may be tested on any day that such testing is required to meet National Fire Protection Association (NFPA) standards.	Record keeping of hours of operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(E).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(F) The emergency generator shall only combust diesel fuel or biodiesel blend having a sulfur content equal to or less than 0.015% by weight.	Record keeping of generator fuel in accordance with Condition 3 - Table 1 (e)(1)(iii)(F).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(G) The emergency generator shall be equipped with a properly functioning non-resettable hour metering device.	Record keeping of generator equipment in accordance with Condition 3 - Table 1 (e)(1)(iii)(G).	NO	
5	Condition 3 - Table 1 (e)(1)(iii)(H) The emergency generator shall not be operated in conjunction with a voluntary demand reduction program or any other interruptible power supply arrangement with a utility, other market participant, or system operator (e.g. Delmarva Power, Delaware Electric Cooperative, PJM, etc.).	Record keeping of reasons for operation in accordance with Condition 3 - Table 1 (e)(1)(iii)(H).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
5	Condition 3 - Table 1 (e)(1)(iii)(I) The emergency generator shall not be transferred off-site without first notifying the Department. Whoever becomes the new owner or operator of this generator within the State of Delaware shall apply for a construction permit.	Record keeping of generator location in accordance with Condition 3 - Table 1 (e)(1)(iii)(I).	NO	
5	Condition 3 - Table 1 (e)(1)(iv) The emergency generator shall be serviced annually by a manufacturer's representative or by personnel trained to perform maintenance according to the manufacturer's recommendations.	Record keeping of maintenance and personnel training/qualifications in accordance with Condition 3 - Table 1 (e)(1)(iv).	NO	
5	Condition 3 - Table 1 (e)(1)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping in accordance with Condition 3 - Table 1 (e)(1)(v).	NO	
5	Condition 3 - Table 1 (e)(1)(vi)(A) The Company shall monitor, for each operating period: The type of fuel used to fire this Emission Unit; The monthly amount of fuel combusted; The sulfur content of the fuel oil for each shipment; and the date, time, duration, and reason for each startup.	Monitoring fuel and fuel usage in accordance with Condition 3 - Table 1 (e)(1)(vi)(A).	NO	
5	Condition 3 - Table 1 (e)(1)(vi)(B) The hours and minutes of operation.	Monitoring of hours of operation in accordance with Condition 3 - Table 1 (e)(1)(vi)(B).	NO	
5	Condition 3 - Table 1 (e)(1)(vii) That required by Condition 3(b)(1)(ii) of this permit.	Testing in accordance with Condition 3 - Table 1 (e)(1)(vii).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
5	Condition 3 - Table 1 (e)(1)(ix)(A) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: the monitoring required in Condition 3 – Table 1(e)(1)(vi).	Record keeping of monitoring data in accordance with Condition 3 - Table 1 (e)(1)(ix)(A).	NO	
5	Condition 3 - Table 1 (e)(1)(ix)(B) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: for each shipment of fuel, shipping receipt and fuel supplier certifications of fuel sulfur content that state: The type of fuel delivered; and The percentage of sulfur in the fuel and the method used to determine the sulfur content.	Record keeping of fuel information in accordance with Condition 3 - Table 1 (e)(1)(ix)(B).	NO	
5	Condition 3 - Table 1 (e)(1)(ix)(C) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: As an alternative to Condition 3–Table 1(e)(1)(ix)(B), the owner may have a the fuel in the generator's fuel tank certified by a third party laboratory, after each shipment of liquid fuel. This certification shall identify: The type of fuel delivered; and The percentage of sulfur in the fuel and the method used to determine the sulfur content.	Record keeping of fuel information in accordance with Condition 3 - Table 1 (e)(1)(ix)(C).	NO	
5	Condition 3 - Table 1 (e)(1)(ix)(D) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: A copy of the initial notification as required by 7 DE Admin Code 1144.	Record keeping of initial notification in accordance with Condition 3 - Table 1 (e)(1)(ix)(D).	NO	



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
5	Condition 3 - Table 1 (e)(1)(ix)(E) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: A copy of the manufacturer's maintenance and operational recommendations.	Record keeping of maintenance and operational manual in accordance with Condition 3 - Table 1 (e)(1)(ix)(E).	NO	
5	Condition 3 - Table 1 (e)(1)(ix)(F) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: Monthly, the hours of operation on a monthly and cumulative twelve (12) month basis.	Record keeping of hours of operation in accordance with Condition 3 -Table 1 (e)(1)(ix)(F).	NO	
5	Condition 3 - Table 1 (e)(1)(ix)(G) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: Monthly, the total fuel usage on a monthly and cumulative twelve (12) month basis.	Record keeping of fuel usage in accordance with Condition 3 - Table 1 (e)(1)(ix)(G).	NO	
5	Condition 3 - Table 1 (e)(1)(ix)(H) In addition to the requirements of Condition 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the following information: A copy of the annual service performed in accordance with Condition 3-Table 1(e)(1)(iv)(A).	Record keeping of service records in accordance with Condition 3 - Table 1 (e)(1)(ix)(H).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
5	Condition 3 - Table 1 (e)(1)(x)(A) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, if the emergency generator is to be reclassified from an emergency generator to a distributed generator, the owner or operator shall submit a letter stating that the generator is to be reclassified. Reclassification shall not occur without written permission from the Department.	Reporting of generator reclassification in accordance with Condition 3 - Table 1 (e)(1)(x)(A).	YES	N/A
5	Condition 3 - Table 1 (e)(1)(x)(B) The Company shall calculate the emissions from emergency generator and include this information to yearly emissions inventory report.	Reporting of emissions in accordance with Condition 3 - Table 1 (e)(1)(x)(B).	YES	April 25, 2018
5	Condition 3 - Table 1 (e)(1)(xi) In addition to that required by Condition 3(c)(3) of this permit, compliance with the operational standards shall be based upon record keeping and reporting requirements outlined above.	Record keeping and reporting of compliance in accordance with Condition 3 - Table 1 (e)(1)(xi).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(ii) The facility's rolling 12-month emission limitations are based on the 4500 SCFM Perennial Energy, Inc. Flare and all permitted passive flares as shown below: NO <sub>x</sub> =23.9 tons, CO=79.6 tons, PM=6.6 tons, NMOC=2.1 tons, SO <sub>x</sub> =58.5 tons, HAPs=0.08 tons.	Monitoring emissions limitations in accordance with Condition 3 - Table 1 (f)(1)(ii).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(iv)(A) As outlined by the unit-specific operational limitations by this permit.	Monitoring of operational limitations in accordance with Condition 3 - Table 1 (f)(1)(iv)(A).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(1)(iv)(B) Only permitted temporary grinders may be used on site and all emissions from the temporary grinders shall be included in the facility wide total emissions.	Reporting of emissions in accordance with Condition 3 - Table 1 (f)(1)(iv)(B).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(iv)(C) Only permitted temporary crushers may be used on site and all emissions from the temporary crushers shall be included in the facility wide total emissions.	Reporting of emissions in accordance with Condition 3 - Table 1 (f)(1)(iv)(C).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping of compliance in accordance with Condition 3 - Table 1 (f)(1)(v).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(vi)(A) The owner/operator shall monitor the following: monthly and rolling 12-month emissions of NO <sub>x</sub> , CO, PM, NMOCs, SO <sub>x</sub> , and HAPs from the facility.	Monitoring of emissions in accordance with Condition 3 - Table 1 (f)(1)(vi)(A).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(vi)(B) The owner/operator shall monitor unit-specific visible emissions as outlined by this permit.	Monitoring of visible emissions in accordance with Condition 3 - Table 1 (f)(1)(vi)(B).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(vi)(C) The owner/operator shall monitor the hours of operation of permitted temporary stationary equipment.	Monitoring of hours of operation in accordance with Condition 3 - Table 1 (f)(1)(vi)(C).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(vii) That required by Condition 3(b)(1)(ii) of this permit.	Testing in accordance with Condition 3 - Table 1 (f)(1)(vii).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(ix) That required by Conditions 3(b)(1)(ii) and 3(b)(2) and Condition 3-Table 1(f)(1)(vi) of this permit.	Record keeping in accordance with Condition 3 - Table 1 (f)(1)(ix).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(1)(x) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall calculate the rolling 12-month emissions from passive flares based on actual hours of operations and best engineering assumptions. The owner/operator shall include the passive flare emissions in the yearly emissions inventory report.	Reporting of emissions in accordance with Condition 3 - Table 1 (f)(1)(x).	YES	April 25, 2018
Facility Wide	Condition 3 - Table 1 (f)(1)(xi)(A) Compliance with the emission limitations identified by the unit-specific emissions shall be demonstrated each month based on the amount of gas combusted, actual NMOC, actual H <sub>2</sub> S concentrations, actual methane content in landfill gas, approved emission factors and good engineering assumptions.	Record keeping of compliance with emission limitations in accordance with Condition 3 - Table 1 (f)(1)(xi)(A).	NO	
Facility Wide	Condition 3 - Table 1 (f)(1)(xi)(B) Any noncompliance with the restrictions of Condition 3-Table 1(f)(xi)(A) shall be evaluated in accordance with the requirements of 7 DE Admin Code 1125, Requirements for Preconstruction Review. Any emission exceedances which trigger the requirements of 7 DE Admin Code 1125 shall subject the facility to full review under this regulation as though construction had not yet commenced at the facility.	Record keeping of noncompliance in accordance with Condition 3 - Table 1 (f)(1)(xi)(B).	NO	
Facility Wide	Condition 3 - Table 1 (f)(2)(i) Odor: The owner/operator shall not cause or allow the emission of odorous air contaminants such as to cause a condition of air pollution.	Record keeping of emissions of odorous air contaminants in accordance with Condition 3 - Table 1 (f)(2)(i).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(2)(iv) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping of compliance in accordance with Condition 3 - Table 1 (f)(2)(iv).	NO	
Facility Wide	Condition 3 - Table 1 (f)(2)(v)(A) Conduct daily odor survey at the perimeter of the facility on days the facility is operational. The daily surveys shall be conducted 6 days a week (Monday through Saturday). The owner or operator shall resume off day monitoring if there are any verified odor complaints on any off day in any subsequent quarter. If a landfill gas odor sufficient to cause or create a condition of air pollution is detected, the owner/operator shall take immediate action to correct landfill gas odor problem. The following information shall be recorded and maintained in written or electronic log. Any written log shall be initialed: Start and end time of survey, presence or absence of odor, wind direction, ambient air temperature, and location monitored. In the event when odor is detected along the perimeter exterior of the landfill, the odor survey log shall include the following additional information: Humidity content of ambient air, average wind speed, actions taken in response to odor found.	Monitoring of odors in accordance with Condition 3 - Table 1 (f)(2)(v)(A).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(2)(v)(B) The owner/operator shall conduct perimeter H <sub>2</sub> S survey (measurement) if H <sub>2</sub> S concentration in LFG exceeds 450 ppm in two consecutive quarters by laboratory analysis (ASTM). The perimeter H <sub>2</sub> S measurements shall be conducted within seventy two (72) hours upon receiving the laboratory results and maintain this information for the Department's reviews.	Monitoring of odors in accordance with Condition 3 - Table 1 (f)(2)(v)(B)	NO	
Facility Wide	Condition 3 - Table 1 (f)(2)(vii) That required by Condition 3(b)(1)(ii) of this permit.	Testing in accordance with Condition 3 - Table 1 (f)(2)(vii).	NO	
Facility Wide	Condition 3 - Table 1 (f)(2)(ix) In addition to that required by Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the owner/operator shall maintain records of the following: A. Odor: 1. Presence or absence of odor; 2. Wind direction and ambient air temperature; 3. Location monitored; 4. Actions taken in response to odors found. B. H <sub>2</sub> S monitoring: 1. Method used for perimeter monitoring (survey); 2. Monitoring results; 3. Monitoring location.	Record keeping of odor logs in accordance with Condition 3 - Table 1 (f)(2)(ix).	NO	

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(2)(x)(A) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall comply with the following: Notify the Department immediately if daily or other odor surveys detect odors beyond the landfill perimeter. The owner/operator shall submit an odor survey summary log by the end of each calendar month for the previous month. The odor survey summary log shall include all information outlined by Condition 3-Table 1(f)(2)(v)(A).	Reporting of odors in accordance with Condition 3 - Table 1 (f)(2)(x)(A).	YES	Submitted monthly throughout the year
Facility Wide	Condition 3 - Table 1 (f)(2)(x)(B) In addition to that required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the owner/operator shall comply with the following: Research and explore various H <sub>2</sub> S generation reduction strategies and control options and implement these strategies as necessary so that the H <sub>2</sub> S concentration in the landfill gas remains consistently low and meets the Ambient Air Quality Standard (AAQS) outlined by 7 DE Admin Code 1103, Section 9 for this pollutant. The facility must submit an annual report to the Department by the end of March of each calendar year for the previous year summarizing its findings including which strategies and control options have been implemented for H <sub>2</sub> S generation reduction.	Compliance with researching H <sub>2</sub> S reduction methods in accordance with Condition 3 - Table 1 (f)(2)(x)(B).	YES	March 28, 2018

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(2)(xi) In addition to that required by Condition 3(c)(3) of this permit, compliance is demonstrated if the owner/operator has no knowledge to the contrary and has no prior history of exceedances.	Compliance with Condition 3(c)(3) in accordance with Condition 3 - Table 1 (f)(2)(xi).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(iii)(A) All structural and mechanical components of the equipment covered by this permit shall be maintained in proper operating condition and such equipment shall be operated at all times in a manner consistent with good air pollution control practice.	Record keeping of equipment maintenance in accordance with Condition 3 - Table 1 (f)(3)(iii)(A).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(iii)(B) No person shall cause or allow land clearing, land grading (including grading for roads), excavation, or use of non-paved roads on private property unless methods, such as the application of water or the use of other techniques approved by the Department, are employed to control dust emission.	Record keeping of dust control actions in accordance with Condition 3 - Table 1 (f)(3)(iii)(B).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(iii)(C) No person shall cause or allow visible particulate emissions of any material being transported by a motor vehicle.	Record keeping of visible particulate emissions in accordance with Condition 3 - Table 1 (f)(3)(iii)(C).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(iii)(D) No person shall cause or allow stockpiling or other storage of material or transport to or from a storage facility in such a manner as may cause a condition of air pollution.	Record keeping of stockpiling practices in accordance with Condition 3 - Table 1 (f)(3)(iii)(D).	NO	



**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(3)(v) Compliance with the standards and limitations will be demonstrated by adherence to the appropriate monitoring, testing, QA/QC, and recordkeeping requirements.	Record keeping of compliance in accordance with Condition 3 - Table 1 (f)(3)(v).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(vi)(A) Each month, the owner/operator shall monitor the operational standards specified under Condition 3–Table 1(f)(3)(iii). The owner/operator shall monitor all of the maintenance performed on equipment covered by this permit, and update records as needed.	Monitoring of operational limitations in accordance with Condition 3 - Table 1 (f)(3)(vi)(A).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(vi)(B) Each day, the owner/operator shall monitor the methods used to store and transport material and the methods used for control of fugitive dust from loading, unloading, clearing, grading, and excavation.	Monitoring of storage, transport, and dust control methods in accordance with Condition 3 - Table 1 (f)(3)(vi)(B).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(vii) That required by Condition 3(b)(1)(ii) of this permit.	Testing in accordance with Condition 3 - Table 1 (f)(3)(vii).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(ix) In addition to that required by Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall maintain records of the monitoring performed in Condition 3–Table 1(f)(3)(vi).	Record keeping of monitoring data in accordance with Condition 3 - Table 1 (f)(3)(ix).	NO	
Facility Wide	Condition 3 - Table 1(f)(3)(x) That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit.	Compliance with Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit in accordance with Condition 3 - Table 1(f)(3)(x).	YES	N/A

**TABLE 1 - Report of Any Required Monitoring**

COLUMN A	COLUMN B	COLUMN C	COLUMN D	
Emission Unit/Point	Applicable Requirement Emission Limitation, Standard, Work Practice Standard or Other Requirement for which monitoring is used to assure compliance	Monitoring	Separate Monitoring Report Required?	If Yes, Date of Separate report Submittal or Attachment ID
Facility Wide	Condition 3 - Table 1 (f)(3)(xi)(A) In addition to that required by Condition 3(c)(3) of this permit, compliance with the operational standards shall be demonstrated by the following: Compliance with the Condition 3-Table 1(f)(3)(iii)(A) shall be demonstrated by adherence to good engineering operations and work practices, and based upon record keeping for the proper operation and maintenance of the equipment covered by this permit.	Record keeping of compliance with operational standards in accordance with Condition 3 - Table 1 (f)(3)(xi)(A).	NO	
Facility Wide	Condition 3 - Table 1 (f)(3)(xi)(B) In addition to that required by Condition 3(c)(3) of this permit, compliance with the operational standards shall be demonstrated by the following: Compliance with the Condition 3 – Table 1(f)(3)(iii)(B), (C), and (D) shall be demonstrated by record keeping.	Record keeping of compliance with operational standards in accordance with Condition 3 - Table 1 (f)(3)(xi)(B).	NO	

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (b)(1)(iii)(D)	2	Flare down for longer than 4 hours while gas compression plant was shut down outside of normal operating hours.
<b>4. Deviation Duration</b>		
<b>4.1 Date (mm/dd/yyyy)</b> Beginning: 01/06/2018 Ending: 01/06/2018	<b>4.2 Time (hr:min)</b> Start: 12:00 End: 16:23	<b>4.3 Duration (hr:min):</b>
<b>5. Probable Cause of Deviation</b>	<b>6. Corrective Action</b>	
Colder than normal temperatures caused valves to freeze closed after a system shutdown. It took more than 4 hours to thaw the valves.	Heating mechanisms were already in place. Operation was restored as quickly as possible given the abnormally cold weather. All valves were in the closed position to prevent venting of the landfill gas to the atmosphere.	
<b>7. Deviation Reporting</b>		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (b)(1)(iii)(D)	2	Flare down for longer than 1 hour while gas compression plant was shut down during normal operating hours.
<b>4. Deviation Duration</b>		
<b>4.1 Date (mm/dd/yyyy)</b> Beginning: 03/23/2018 Ending: 03/23/2018	<b>4.2 Time (hr:min)</b> Start: 10:04 End: 11:06	<b>4.3 Duration (hr:min):</b>
<b>5. Probable Cause of Deviation</b>	<b>6. Corrective Action</b>	
Staff installed new lightening arrestors on the transformer, which required electricity to be shut down to the flare and gas plant.	Installation of lightening arrestors and restoration of power were completed as quickly as possible. All valves were in the closed position to prevent venting of the landfill gas to the atmosphere.	
<b>7. Deviation Reporting</b>		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (c)(1)(iii)(H)(1)	3	Positive pressure detected at wellhead.
4. Deviation Duration		
4.1 Date (mm/dd/yyyy) Beginning: 00/00/0000 Ending: 00/00/0000	4.2 Time (hr:min) Start: 00:00 End: 00:00	4.3 Duration (hr:min):
5. Probable Cause of Deviation	6. Corrective Action	
See Attachment B for additional information.		
7. Deviation Reporting		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (c)(1)(iii)(I)(1)	3	Oxygen level greater than 5% detected at wellhead.
<b>4. Deviation Duration</b>		
<b>4.1 Date (mm/dd/yyyy)</b> Beginning: 00/00/0000 Ending: 00/00/0000	<b>4.2 Time (hr:min)</b> Start: 00:00 End: 00:00	<b>4.3 Duration (hr:min):</b>
<b>5. Probable Cause of Deviation</b>	<b>6. Corrective Action</b>	
See Attachment C for additional information.		
<b>7. Deviation Reporting</b>		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (c)(1)(iii)(I)(1)	3	Temperature greater than 131°F detected at wellhead.
4. Deviation Duration		
4.1 Date (mm/dd/yyyy) Beginning: 00/00/0000 Ending: 00/00/0000	4.2 Time (hr:min) Start: 00:00 End: 00:00	4.3 Duration (hr:min):
5. Probable Cause of Deviation	6. Corrective Action	
See Attachment C for additional information.		
7. Deviation Reporting		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (c)(1)(iii)(J)	3	Methane surface emissions detected greater than 500 ppm.
4. Deviation Duration		
4.1 Date (mm/dd/yyyy) Beginning: 00/00/0000 Ending: 00/00/0000	4.2 Time (hr:min) Start: 00:00 End: 00:00	4.3 Duration (hr:min):
5. Probable Cause of Deviation	6. Corrective Action	
See Attachment D for additional information.		
7. Deviation Reporting		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		



**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (c)(1)(xi)(F)(2)	3	The 10-day remonitoring event for CILFHB06 was missed.
<b>4. Deviation Duration</b>		
<b>4.1 Date (mm/dd/yyyy)</b> Beginning: 05/05/2018 Ending: 05/15/2018	<b>4.2 Time (hr:min)</b> Start: 00:00 End: 00:00	<b>4.3 Duration (hr:min):</b>
<b>5. Probable Cause of Deviation</b>	<b>6. Corrective Action</b>	
Technician error. The well was still in the decommissioning process when the exceedance occurred and the next monthly monitoring was scheduled for 5/15/2018.	The technician recognized the error himself and was instructed to pay closer attention to how all monitoring schedules fit in together.	
<b>7. Deviation Reporting</b>		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (c)(1)(xi)(F)(3)	3	The 20-day remonitoring event for Manhole MH-V2 was missed.
<b>4. Deviation Duration</b>		
<b>4.1 Date (mm/dd/yyyy)</b> Beginning: 03/05/2018 Ending: 03/06/2018	<b>4.2 Time (hr:min)</b> Start: 00:00 End: 00:00	<b>4.3 Duration (hr:min):</b>
<b>5. Probable Cause of Deviation</b>	<b>6. Corrective Action</b>	
Technician error. The deadline for the 20-day event was calculated as 20 days from the first exceedance instead of 10 days from the 10-day remonitoring event. The 20-day event was missed by 1 day.	The technician has been instructed that the 20-day remonitoring event falls 10 days from the 10-day remonitoring event.	
<b>7. Deviation Reporting</b>		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (d)(1)(x)(B)(2)	4	Collection system down time exceeded 4 hours outside of operating hours.
<b>4. Deviation Duration</b>		
<b>4.1 Date (mm/dd/yyyy)</b> Beginning: 01/06/2018 Ending: 01/06/2018	<b>4.2 Time (hr:min)</b> Start: 12:00 End: 16:23	<b>4.3 Duration (hr:min):</b>
<b>5. Probable Cause of Deviation</b>	<b>6. Corrective Action</b>	
Colder than normal temperatures caused valves to freeze closed after a system shutdown. It took more than 4 hours to thaw the valves.	Heating mechanisms were already in place. Operation was restored as quickly as possible given the abnormally cold weather. All valves were in the closed position to prevent venting of the landfill gas to the atmosphere.	
<b>7. Deviation Reporting</b>		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE		
7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**Regulation No. 30 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-R3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 2 - Identification of Deviations**

1. Permit Term or Condition for which there is a deviation	2. Emission Unit Identification	3. Deviation Description
Condition 3 - Table 1 (d)(1)(x)(B)(2)	4	Collection system down time exceeded 1 hour during operating hours.
<b>4. Deviation Duration</b>		
<b>4.1 Date (mm/dd/yyyy)</b> Beginning: 03/23/2018 Ending: 03/23/2018	<b>4.2 Time (hr:min)</b> Start: 10:04 End: 11:06	<b>4.3 Duration (hr:min):</b>
<b>5. Probable Cause of Deviation</b>	<b>6. Corrective Action</b>	
Staff installed new lightening arrestors on the transformer, which required electricity to be shut down to the flare and gas plant.	Installation of lightening arrestors and restoration of power were completed as quickly as possible. All valves were in the closed position to prevent venting of the landfill gas to the atmosphere.	
<b>7. Deviation Reporting</b>		
7.1 Did your Permit require that this Deviation be reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 7.2 Was this Deviation reported previously? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE 7.2(a) If YES, provide the date the written report was submitted: 00/00/0000		

**7 DE Admin. Code 1130 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-Renewal 3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 3 – Additional Information**

<b>Emission Unit/ Point</b>	<b>Deviation</b>	<b>Additional Information</b>
<b>N/A</b>		

**7 DE Admin. Code 1130 (Title V) State Operating Permit Program  
Air Quality Management Section  
Semi-Annual Report (continued)**

**AQM-1001DD**

**Facility Name:** CIL

**Operating Permit Number:** AQM-003/00111-Renewal 3

**Reporting Period:** 01/01/2018 TO 06/30/2018

**Table 4 – Additional Information – List of Attachments**

<b>Attachment #</b>	<b>Description/Document Title</b>
<b>Attachment A</b>	<b>Collection System Operations Log</b>
<b>Attachment B</b>	<b>Wellhead Monitoring Results - Pressure Exceedances</b>
<b>Attachment C</b>	<b>Wellhead Monitoring Results - Oxygen and Temperature Exceedances</b>
<b>Attachment D</b>	<b>Quarterly Surface Emission Monitoring Exceedances</b>
<b>Attachment E</b>	<b>Well Commissioning Log</b>
<b>Attachment F</b>	<b>CIL Landfill Gas System Plan</b>

**Collection Systems Operations Log  
Cherry Island Landfill  
January 1, 2018 through June 30, 2018**

Condition 3 - Table 1 (b)(1)(iii)(D), (c)(1)(x)(C)(2), (d)(1)(x)(B)(1) and (2) Emission Units 2 and 4

Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
1/1/18			24.00			0.00	24	Cummins Having Problems
1/2/18		12:29	12.48			0.00	24	Cummins Having Problems
1/2/18	12:43	13:15	0.53					Cummins Having Problems
1/2/18	20:59	21:05	0.10					Cummins Having Problems
1/2/18	21:16	21:30	0.23					Cummins Having Problems
1/3/18			0.00	8:09	11:07	2.96	21.04	Rosey's cleaning sumps
1/4/18	2:32	3:03	0.51	15:37	16:31	0.90	23.10	Cummins Having Problems/low flow due to cummins restart
1/4/18	15:29	15:34	0.08					Cummins Having Problems
1/4/18	15:44	16:11	0.45					Cummins Having Problems
1/5/18			0.00			0.00	24	
1/6/18	9:20		14.67	12:00	16:23	4.38	19.62	Valve Frozen and trouble with PLC
1/7/18			24.00			0.00	24	Cummins Having Problems - Davis installing bypass line
1/8/18			24.00	14:35	14:55	0.33	23.67	Cummins having problems/Tripped while trying to close valve 121
1/9/18		11:39	11.65	8:21	9:19	0.96	23.04	Cummins having problems /Power Failure
1/9/18	11:52	13:26	1.56					Cummins having problems
1/10/18			0.00			0.00	24	
1/11/18	7:16	7:30	0.23	7:16	8:12	0.93	23.07	Power Glitch
1/12/18			0.00	16:40		7.33	16.67	Flow Meter frozen up which caused it to show high flow
1/13/18			0.00		13:44	13.73	10.27	Flow Meter frozen up which caused it to show high flow
1/14/18	10:08	15:00	4.86	6:24	11:08	4.73	18.54	Flare tripped on low flow, and plant tripped due to problems with Cummins GC.
1/14/18				23:16		0.73		Cummins increased flow which caused low flow to flare
1/15/18			0.00		6:48	6.80	17.20	Cummins increased flow which caused low flow to flare
1/16/18	10:35	10:47	0.20	9:54	10:38	0.73	22.09	Wellfield maintenance causing high O2/ Problems with Flare valve
1/16/18	10:54	12:54	2.00	10:39	11:09	0.50		High O2/ problems with flare valve
1/16/18	13:08	13:27	0.31	11:10	11:18	0.13		High O2/ problems with flare valve
1/16/18				11:19	11:28	0.15		Problems with Flare valve
1/16/18				11:29	11:41	0.20		Problems with Flare valve
1/16/18				11:42	11:54	0.20		Problems with Flare valve

Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
1/17/18			0.00	12:55	13:26	0.51	23.22	S/D Flare to install new solenoid valve
1/17/18				13:24	13:40	0.26		Adjusting vent on solenoid
1/17/18				13:48	13:49	0.01		Adjusting vent on solenoid
1/18/18			0.00			0.00	24	
1/19/18			0.00			0.00	24	
1/20/18			0.00	6:46	7:31	0.75	22.44	Cummins increased flow which caused low flow to flare
1/20/18				8:31	9:20	0.81		Cummins increased flow which caused low flow to flare
1/21/18			0.00			0.00	24	
1/22/18			0.00			0.00	24	
1/23/18	16:25	16:28	0.05	12:43	13:22	0.65	23.35	Problems with Cummins/ Installed Rental Flow Meter
1/23/18	16:39	17:07	0.46					Cummins having problems with level switch
1/24/18			0.00			0.00	24	
1/25/18			0.00			0.00	24	
1/26/18			0.00			0.00	24	
1/27/18			0.00	9:10	9:58	0.80	23.20	Cummins increased flow which caused low flow to flare
1/28/18	21:46		2.23			0.00	24	Problems at Cummins
1/29/18		10:19	10.31	12:36	12:44	0.13	23.87	Problems at cummins/ Tripped on low flow
1/30/18			0.00	9:15	10:15	1.00	23.00	S/D to reduce vacuum, working on manholes
1/31/18			0.00			0.00	24	
2/1/18			0.00			0.00	24	
2/2/18	16:07	16:12	0.08	16:14	16:21	0.11	23.89	Tripped due to high pressure. Flare tripped while restarting the plant.
2/3/18			0.00			0.00	24	
2/4/18			0.00			0.00	24	
2/5/18			0.00			0.00	24	
2/6/18			0.00			0.00	24	
2/7/18			0.00			0.00	24	
2/8/18			0.00			0.00	24	
2/9/18			0.00			0.00	24	
2/10/18			0.00			0.00	24	
2/11/18			0.00	23:25		0.58	23.42	Tripped due to faulty thermocouple
2/12/18			0.00		1:00	1.00	19.53	Tripped due to faulty thermocouple
2/12/18				2:12	4:47	2.58		Tripped due to faulty thermocouple



Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
2/12/18				6:13	6:43	0.50		Tripped due to faulty thermocouple
2/12/18				8:00	8:05	0.08		Tripped due to faulty thermocouple
2/12/18				10:19	10:25	0.10		Tripped due to faulty thermocouple
2/12/18				13:47	13:51	0.06		Tripped due to faulty thermocouple
2/12/18				14:53	15:02	0.15		Tripped due to faulty thermocouple
2/13/18			0.00	7:18	7:21	0.05	23.26	Tripped due to faulty thermocouple
2/13/18				12:43	12:49	0.10		Tripped due to faulty thermocouple
2/13/18				12:59	13:33	0.56		Tripped due to faulty thermocouple
2/13/18				13:44	13:46	0.03		Tripped due to faulty thermocouple
2/14/18			0.00	10:25	10:30	0.08	23.51	Tripped due to faulty thermocouple
2/14/18				13:09	13:34	0.41		Replaced thermocouple on 2/14/18
2/15/18			0.00			0.00	24	
2/16/18			0.00			0.00	24	
2/17/18			0.00			0.00	24	
2/18/18			0.00			0.00	24	
2/19/18			0.00			0.00	24	
2/20/18	9:03	9:04	0.01	9:03	10:13	1.16	22.84	Power Glitch
2/21/18			0.00			0.00	24	
2/22/18			0.00			0.00	24	
2/23/18			0.00			0.00	24	
2/24/18			0.00			0.00	24	
2/25/18			0.00			0.00	24	
2/26/18			0.00			0.00	24	
2/27/18			0.00			0.00	24	
2/28/18			0.00			0.00	24	
3/1/18			0.00			0.00	24	
3/2/18				10:32	11:10	0.63	21.97	Plant flow meter reading high, caused flare to shutdown
3/2/18	16:41	16:55	0.23	16:41	18:05	1.40		Power Failure
3/2/18	17:22	17:26	0.06					Tripped on high pressure, Cummins valve closed
3/3/18	16:04	16:13	0.15	16:04	17:04	1.00	23.00	Power Failure
3/4/18			0.00			0.00	24	
3/5/18			0.00			0.00	24	

Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
3/6/18			0.00			0.00	24	
3/7/18			0.00			0.00	24	
3/8/18			0.00			0.00	24	
3/9/18			0.00			0.00	24	
3/10/18			0.00			0.00	24	
3/11/18			0.00			0.00	24	
3/12/18			0.00			0.00	24	
3/13/18			0.00			0.00	24	
3/14/18			0.00	17:22	20:01	2.65	21.35	Cummins increased flow, not enough for flare
3/15/18			0.00			0.00	24	
3/16/18			0.00	14:10	15:15	1.08	22.92	Cummins increased flow, not enough for flare
3/17/18			0.00			0.00	24	
3/18/18			0.00			0.00	24	
3/19/18			0.00			0.00	24	
3/20/18			0.00			0.00	24	
3/21/18			0.00	2:31	11:06	8.58	14.82	Cummins increased flow, not enough for flare
3/21/18				20:48	21:24	0.60		Cummins increased flow, not enough for flare
3/22/18			0.00	1:45	6:56	5.18	18.82	Cummins increased flow, not enough for flare
3/23/18	9:58	11:08	1.16	9:58	11:15	1.28	22.72	Shutdown to install lightening arrester
3/24/18			0.00			0.00	24	
3/25/18			0.00			0.00	24	
3/26/18			0.00	6:31	6:43	0.20	21.47	Cummins increased flow, not enough for flare
3/26/18	18:51	21:04	2.21	18:51	21:11	2.33		Power Failure
3/27/18	1:38	12:50	11.20			0.00	24	High O2
3/28/18			0.00	13:04	13:33	0.48	23.52	Cummins increased flow, not enough for flare
3/29/18			0.00			0.00	24	
3/30/18			0.00			0.00	24	
3/31/18			0.00			0.00	24	
4/1/18			0.00			0.00	24	
4/2/18			0.00			0.00	24	
4/3/18			0.00			0.00	24	
4/4/18			0.00			0.00	24	

Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
4/5/18			0.00			0.00	24	
4/6/18			0.00			0.00	24	
4/7/18			0.00			0.00	24	
4/8/18	5:40	8:38	2.96	5:40	8:52	3.20	20.80	Lost the signal for valve 121
4/9/18	7:14	10:54	3.66	10:57	11:06	0.15	23.85	Shutdown for Cummins Maintenance
4/10/18			0.00	12:19	12:25	0.10	23.90	Tripped on low flow
4/11/18			0.00			0.00	24	
4/12/18			0.00			0.00	24	
4/13/18			0.00			0.00	24	
4/14/18			0.00			0.00	24	
4/15/18			0.00			0.00	24	
4/16/18			0.00			0.00	24	
4/17/18			0.00			0.00	24	
4/18/18			0.00			0.00	24	
4/19/18			0.00			0.00	24	
4/20/18			0.00			0.00	24	
4/21/18			0.00			0.00	24	
4/22/18			0.00			0.00	24	
4/23/18			0.00			0.00	24	
4/24/18			0.00			0.00	24	
4/25/18			0.00			0.00	24	
4/26/18			0.00			0.00	24	
4/27/18			0.00			0.00	24	
4/28/18			0.00			0.00	24	
4/29/18			0.00			0.00	24	
4/30/18			0.00			0.00	24	
5/1/18	09:57	10:08	0.18	11:32	11:36	0.06	23.91	Tripped on high discharge pressure
5/1/18	11:31	11:35	0.06	11:49	11:51	0.03		Tripped on high discharge pressure/tripped on high vacuum
5/1/18	12:13	13:30	1.28					Cummins shut us down for stack testing
5/1/18	13:52	17:25	3.55					Cummins shut us down for stack testing
5/2/18	13:27	17:53	4.43	18:04	18:19	0.25	23.75	Cummins testing
5/2/18	18:00	18:15	0.25					Cummins testing

Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
5/2/18	18:28		5.53					Cummins testing
5/3/18		11:29	11.48			0.00	24	Cummins testing
5/4/18			0.00			0.00	24	
5/5/18			0.00			0.00	24	
5/6/18			0.00			0.00	24	
5/7/18			0.00			0.00	24	
5/8/18			0.00			0.00	24	
5/9/18			0.00			0.00	24	
5/10/18			0.00			0.00	24	
5/11/18			0.00			0.00	24	
5/12/18	5:36	7:23	1.78	5:36	10:50	5.23	18.77	Power Failure
5/13/18			0.00			0.00	24	
5/14/18			0.00			0.00	24	
5/15/18			0.00			0.00	24	
5/16/18			0.00			0.00	24	
5/17/18			0.00			0.00	24	
5/18/18			0.00			0.00	24	
5/19/18			0.00			0.00	24	
5/20/18			0.00			0.00	24	
5/21/18	7:52	12:42	4.83	7:52	8:32	0.66	23.34	Cummins shut us down for media change out.
5/22/18			0.00			0.00	24	
5/23/18			0.00			0.00	24	
5/24/18	10:46	11:35	0.81			0.00	24	Problems at Croda
5/25/18			0.00			0.00	24	
5/26/18			0.00			0.00	24	
5/27/18	05:27	5:43	0.26	5:27	10:48	5.35	18.65	Power Failure
5/28/18			0.00			0.00	24	
5/29/18	7:46	11:37	3.85			0.00	24	Cummins shut us down for media change out.
5/30/18			0.00	9:39	10:20	0.68	23.32	Changed our Flare flow meter
5/31/18			0.00			0.00	24	
6/1/18			0.00			0.00	24	

Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
6/2/18			0.00			0.00	24	
6/3/18			0.00			0.00	24	
6/4/18			0.00			0.00	24	
6/5/18			0.00	6:04	7:16	1.20	22.80	Glitch with flow meter
6/6/18			0.00			0.00	24	
6/7/18			0.00			0.00	24	
6/8/18			0.00			0.00	24	
6/9/18			0.00			0.00	24	
6/10/18			0.00			0.00	24	
6/11/18			0.00			0.00	24	
6/12/18			0.00			0.00	24	
6/13/18			0.00	3:06	3:16	0.16	15.25	Tripped on Lower thermocouple temp.
6/13/18				5:18	5:54	0.60		Tripped on Lower thermocouple temp.
6/13/18				6:04	6:29	0.41		Tripped on Lower thermocouple temp.
6/13/18				8:20	15:55	7.58		Tripped on Lower thermocouple temp.
6/14/18			0.00			0.00	24	
6/15/18				18:53	21:05	2.25	21.75	Tripped on Lower thermocouple temp.
6/16/18	14:29	15:13	0.73	0:45	5:38	4.88	9.43	Cummins valve closed causing plant to trip/Tripped on Lower thermocouple temp.
6/16/18				5:58	6:15	0.28		Tripped on Lower thermocouple temp.
6/16/18				6:46	6:51	0.08		Tripped on Lower thermocouple temp.
6/16/18				7:25	7:52	0.45		Tripped on Lower thermocouple temp.
6/16/18				7:58	11:05	3.11		Tripped on Lower thermocouple temp.
6/16/18				11:35	15:34	3.98		Tripped on Lower thermocouple temp.
6/16/18				15:52	15:56	0.06		Tripped on Lower thermocouple temp.
6/16/18				16:11	16:23	0.20		Tripped on Lower thermocouple temp.
6/16/18				16:34	16:36	0.03		Tripped on Lower thermocouple temp.
6/16/18				21:16	21:23	0.11		Tripped on Lower thermocouple temp.
6/16/18				22:11	22:18	0.11		Tripped on Lower thermocouple temp.
6/16/18				22:43		1.28		Tripped on Lower thermocouple temp.
6/17/18	6:01	6:06	0.08		2:49	2.81	2.56	Unknown malfunction/Tripped on Lower thermocouple temp.
6/17/18	8:20	8:25	0.08	3:13	3:31	0.30		Unknown malfunction/Tripped on Lower thermocouple temp.
6/17/18				3:43	3:51	0.13		Tripped on Lower thermocouple temp.

Date	Plant Stopped	Plant Started	Down time Hours	PEI Flare Stopped	PEI Flare Started	Down time Hours	Run Hours	Reason
6/17/18				4:04	5:43	1.65		Tripped on Lower thermocouple temp.
6/17/18				5:50	6:10	0.33		Tripped on Lower thermocouple temp.
6/17/18				6:16	6:28	0.20		Tripped on Lower thermocouple temp.
6/17/18				6:42	6:57	0.25		Tripped on Lower thermocouple temp.
6/17/18				7:21	7:29	0.13		Tripped on Lower thermocouple temp.
6/17/18				7:38	8:42	1.06		Tripped on Lower thermocouple temp.
6/17/18				8:49	9:06	0.28		Tripped on Lower thermocouple temp.
6/17/18				9:42		14.30		Tripped on Lower thermocouple temp.
6/18/18					7:08	7.13	15.50	Tripped on Lower thermocouple temp.
6/18/18				7:53	8:03	0.16		Tripped on Lower thermocouple temp.
6/18/18				8:09	8:45	0.60		Tripped on Lower thermocouple temp.
6/18/18				10:36	11:03	0.45		Tripped on Lower thermocouple temp.
6/18/18			0.00	11:11	11:21	0.16		Tripped on Lower thermocouple temp.
6/19/18			0.00			0.00	24	
6/20/18			0.00			0.00	24	
6/21/18			0.00			0.00	24	
6/22/18			0.00			0.00	24	
6/23/18			0.00			0.00	24	
6/24/18			0.00			0.00	24	
6/25/18			0.00			0.00	24	
6/26/18			0.00			0.00	24	
6/27/18			0.00			0.00	24	
6/28/18			0.00			0.00	24	
6/29/18			0.00			0.00	24	
6/30/18			0.00			0.00	24	

**WELLHEAD MONITORING RESULTS**  
**PRESSURE EXCEEDANCES (with passing read shown)**  
**Cherry Island Landfill**  
**JANUARY 1, 2018 THROUGH JUNE 30, 2018**

Condition 3 - Table 1 (c)(1)(x)(C) Emission Unit 3

Device ID	Date/Time	CH <sub>4</sub> (%)	O <sub>2</sub> (%)	Static Pressure ("H <sub>2</sub> O)	Temperature (°F)	Length of Exceedance (days)	Comments
January							
CILFG003	1/9/2018 9:34	55.6	0.4	0.03	46.4	<1	Increased Vacuum
CILFG003	1/9/2018 9:36	55.6	0.1	-0.15	50.9		Re Check
CILFG013	1/9/2018 10:12	36.0	0.4	0.00	49.6	<1	Increased Vacuum
CILFG013	1/9/2018 10:15	36.3	0.2	-0.02	52.8		Re Check
CILFG016	1/9/2018 13:59	27.8	0.2	0.00	64.3	<1	Increased Vacuum
CILFG016	1/9/2018 14:01	27.7	0.0	-0.11	66.6		Re Check
CILFG030	1/9/2018 10:40	58.2	0.2	0.02	59.9	<1	Increased Vacuum
CILFG030	1/9/2018 10:42	58.0	0.0	-0.17	62.6		Re Check
CILFG039	1/24/2018 10:56	3.7	1.5	0.20	58.0	<1	Increased Vacuum
CILFG039	1/24/2018 10:58	3.6	1.1	-0.10	72.0		Re Check
CILFG046	1/10/2018 8:11	64.1	0.3	0.01	32.3	<1	Increased Vacuum
CILFG046	1/10/2018 8:14	63.9	0.1	-0.21	41.3		Re Check
CILFG096	1/10/2018 14:25	59.3	0.7	0.19	69.2	<1	Increased Vacuum
CILFG096	1/10/2018 14:27	59.4	0.0	-0.56	80.4		Re Check
CILFG135R	1/10/2018 11:42	58.3	0.5	0.15	113.2	<1	Increased Vacuum
CILFG135R	1/10/2018 11:44	55.9	0.5	-1.90	113.2		Re Check
CILFG259	1/25/2018 9:58	59.8	0.1	4.10	39.0	<1	Connected for Read
CILFG259	1/25/2018 9:59	60.6	0.1	-1.80	93.0		Connected for Read
CILFG292	1/10/2018 10:50	61.8	0.3	0.03	44.1	<1	Increased Vacuum
CILFG292	1/10/2018 10:53	60.7	0.4	-11.36	43.9		Re Check
CILFG302	1/23/2018 14:16	57.4	0.0	-7.94	133.4	2	Decreased Vacuum
CILFG302	1/23/2018 14:18	56.9	0.0	0.31	132.0		Increased Vacuum
CILFG302	1/23/2018 14:21	57.1	0.0	-1.03	132.7		Decreased Vacuum
CILFG302	1/25/2018 9:00	57.7	0.0	-2.30	129.4		Re Check
CILFG304	1/25/2018 13:20	59.8	0.0	0.00	86.0	<1	Connected for Read
CILFG304	1/25/2018 13:21	59.7	0.0	-2.10	93.0		Connected for Read
CILFHC15	1/31/2018 10:24	59.6	0.1	2.50	46.0	<1	Increased Vacuum
CILFHC15	1/31/2018 10:25	59.8	0.0	-2.50	43.0		Connected for Read
February							
CILFG013	2/13/2018 9:35	34.6	1.0	0.04	44.0	<1	Increased Vacuum
CILFG013	2/13/2018 9:38	33.8	0.8	-0.13	52.0		Re Check
CILFG193	2/14/2018 13:05	59.9	0.0	1.40	66.0	<1	Increased Vacuum
CILFG193	2/14/2018 13:07	60.5	0.0	-1.50	67.0		Connected for Read
CILFG228R	2/21/2018 9:08	13.9	16.5	-6.84	64.4	15	Decreased Vacuum
CILFG228R	2/21/2018 9:29	32.0	10.8	-17.08	67.0		Increased Vacuum
CILFG228R	2/22/2018 14:42	11.4	18.0	-20.59	45.8		Decreased Vacuum
CILFG228R	2/22/2018 14:44	11.9	18.0	-21.09	45.1		Decreased Vacuum
CILFG228R	2/26/2018 14:14	24.1	12.8	-20.40	55.4		Decreased Vacuum
CILFG228R	2/26/2018 14:24	29.4	11.5	-20.32	54.9		Decreased Vacuum
CILFG228R	3/8/2018 10:58	68.7	3.4	1.71	52.7		Increased Vacuum
CILFG228R	3/8/2018 10:59	82.0	0.2	-18.66	52.8		Re Check
CILFG281	2/15/2018 10:43	62.9	0.0	0.12	76.4	<1	Increased Vacuum
CILFG281	2/15/2018 10:45	61.2	0.0	-1.12	84.4		Re Check

Device ID	Date/Time	CH <sub>4</sub> (%)	O <sub>2</sub> (%)	Static Pressure ("H <sub>2</sub> O)	Temperature (°F)	Length of Exceedance (days)	Comments
March							
CILFG003	3/14/2018 13:25	55.0	0.0	0.08	48.9	2	Increased Vacuum
CILFG003	3/16/2018 14:36	39.1	0.7	-0.49	52.9		Re Check
CILFG022	3/20/2018 11:25	36.7	0.0	0.18	34.1	< 1	Increased Vacuum
CILFG022	3/20/2018 11:29	36.5	0.0	-0.26	40.2		Re Check
CILFG025	3/20/2018 11:19	37.5	0.0	0.12	34.3	< 1	Increased Vacuum
CILFG025	3/20/2018 11:21	36.4	0.0	-0.03	36.2		Re Check
CILFG063	3/14/2018 8:23	60.3	0.2	0.13	42.9	< 1	Increased Vacuum
CILFG063	3/14/2018 8:26	51.1	0.1	-4.34	59.8		Re Check
CILFG109	3/20/2018 8:01	20.3	11.9	-4.53	43.9	2	Decreased Vacuum
CILFG109	3/20/2018 8:05	10.0	16.1	-2.28	36.8		Re Check
CILFG109	3/22/2018 13:48	62.0	0.2	0.71	49.8		Increased Vacuum
CILFG109	3/22/2018 13:50	61.9	0.1	-0.15	55.7		Re Check
CILFG134	3/12/2018 11:22	71.6	0.1	1.27	46.7	< 1	Increased Vacuum
CILFG134	3/12/2018 11:24	72.5	0.0	-1.52	38.8		Re Check
CILFG193	3/19/2018 9:43	59.4	0.0	0.80	58.0	3	Connected for Read
CILFG193	3/22/2018 10:25	59.8	0.0	-5.00	87.0		Connected for Read
CILFG221	3/19/2018 9:51	59.4	0.0	3.20	76.0	3	Connected for Read
CILFG221	3/22/2018 9:46	59.8	0.1	-5.60	87.0		Connected for Read
CILFG228R	3/8/2018 10:58	68.7	3.4	1.71	52.7	< 1	Increased Vacuum
CILFG228R	3/8/2018 10:59	82.0	0.2	-18.66	52.8		Re Check
CILFG239R	3/19/2018 10:42	60.0	0.0	2.30	55.0	4	Connected for Read
CILFG239R	3/23/2018 13:45	58.2	2.2	-20.69	91.8		Connected for Read
CILFG259	3/19/2018 10:12	59.9	0.0	40.40	79.0	7	Connected for Read
CILFG259	3/23/2018 13:37	58.7	0.3	33.29	56.8		Connected for Read
CILFG259	3/26/2018 9:29	59.5	0.0	-3.50	59.0		Connected for Read
CILFG264	3/14/2018 11:30	28.0	0.0	0.07	43.7	< 1	Increased Vacuum
CILFG264	3/14/2018 11:32	27.6	0.0	-1.55	53.7		Re Check
CILFHC03	3/12/2018 14:49	13.3	19.2	0.03	68.3	< 1	Increased Vacuum
CILFHC03	3/12/2018 14:51	34.1	0.7	-0.33	74.4		Re Check
April							
CILFG014	4/12/2018 9:09	13.1	0.1	1.11	70.4	<1	Increased Vacuum
CILFG014	4/12/2018 9:18	18.3	0.0	-3.34	81.7		Re Check
CILFG032	4/12/2018 8:33	23.0	2.2	0.15	75.4	<1	Increased Vacuum
CILFG032	4/12/2018 8:35	22.1	2.7	-0.41	76.6		Re Check
CILFG074	4/5/2018 9:33	64.8	0.3	0.01	45.3	<1	Increased Vacuum
CILFG074	4/5/2018 9:35	65.8	0.5	-5.59	45.4		Re Check
CILFG096	4/11/2018 9:05	25.2	12.1	-1.29	76.0	1	Decreased Vacuum
CILFG096	4/11/2018 9:08	26.4	11.6	-0.48	75.3		Decreased Vacuum
CILFG096	4/12/2018 10:57	35.2	7.6	-0.40	81.6		Decreased Vacuum
CILFG096	4/12/2018 11:01	56.4	0.7	0.02	81.0		Increased Vacuum
CILFG096	4/12/2018 11:03	56.0	0.7	-0.01	82.5		Re Check
CILFG134	4/3/2018 8:35	68.1	0.1	0.08	45.4	<1	Increased Vacuum
CILFG134	4/3/2018 8:37	68.4	0.1	-2.99	43.1		Re Check
CILFG137R	4/5/2018 9:12	60.4	0.0	0.19	87.7	<1	Increased Vacuum
CILFG137R	4/5/2018 9:15	60.4	0.0	-3.40	91.1		Re Check
CILFG226R	4/23/2018 10:53	58.6	0.0	2.20	89.0	3	Connected for Read
CILFG226R	4/26/2018 6:59	58.7	0.1	-14.10	57.0		Connected for Read
CILFG308	4/23/2018 14:20	60.4	0.1	1.00	78.0	3	Connected for Read
CILFG308	4/26/2018 6:37	59.3	0.1	-17.40	59.0		Connected for Read
CILFHC15	4/10/2018 10:16	59.5	0.0	0.82	67.9	<1	Increased Vacuum
CILFHC15	4/10/2018 10:19	59.6	0.0	-0.60	62.6		Re Check



Device ID	Date/Time	CH <sub>4</sub> (%)	O <sub>2</sub> (%)	Static Pressure ("H <sub>2</sub> O)	Temperature (°F)	Length of Exceedance (days)	Comments
May							
CILFG135R	5/9/2018 10:16	58.5	0.0	1.71	79.5	1	Increased Vacuum
CILFG135R	5/10/2018 14:15	49.3	2.6	-4.54	112.5		Re Check
CILFG156R2	5/21/2018 8:52	58.6	0.0	7.00	71.0	2	Connected for Read
CILFG156R2	5/23/2018 8:09	31.0	0.7	-7.90	117.0		Connected for Read
CILFG234	5/21/2018 9:11	59.8	0.0	1.70	77.0	2	Connected for Read
CILFG234	5/23/2018 8:19	59.4	0.1	-3.80	86.0		Connected for Read
June							
No pressure exceedances to report for the month of June							

**SUMMARY OF PRESSURE EXCEEDANCES  
JANUARY 1, 2018 THROUGH JUNE 30, 2018**

Month	Number of Vertical Wells with Pressure Exceedances	Number of Horizontal Collectors with Pressure Exceedances
January	12	1
February	4	0
March	12	1
April	8	1
May	3	0
June	0	0

**WELLHEAD MONITORING RESULTS**  
**OXYGEN EXCEEDANCES (with passing read shown)**  
**Cherry Island Landfill**  
**JANUARY 1, 2018 THROUGH JUNE 30, 2018**

Condition 3 - Table 1 (c)(1)(x)(C) Emission Unit 3

Device ID	Date/Time	CH <sub>4</sub> (%)	O <sub>2</sub> (%)	Static Pressure ("H <sub>2</sub> O)	Temperature (°F)	Length of Exceedance (days)	Comments
January							
CILFG095	1/24/2018 9:40	28.0	6.8	-21.50	108.0	1	Decreased Vacuum
CILFG095	1/24/2018 9:44	27.1	7.1	-10.30	107.0		Decreased Vacuum
CILFG095	1/25/2018 9:08	34.8	4.4	-8.01	102.0		Re Check
CILFG191	1/24/2018 9:55	38.6	7.3	-24.20	45.0	5	Decreased Vacuum
CILFG191	1/24/2018 9:57	29.2	10.4	-22.00	42.0		Decreased Vacuum
CILFG191	1/25/2018 9:28	26.3	11.2	-21.71	49.1		Increased Vacuum
CILFG191	1/25/2018 9:30	22.7	12.4	-23.70	37.5		Decreased Vacuum
CILFG191	1/29/2018 13:35	44.3	4.7	-19.56	43.8		Recheck
CILFG264	1/24/2018 11:20	7.8	5.7	-7.50	103.0	1	Decreased Vacuum
CILFG264	1/24/2018 11:23	8.0	5.1	-1.30	94.0		Decreased Vacuum
CILFG264	1/25/2018 9:39	17.2	0.2	-0.36	42.9		Re Check
February							
CILFG032	2/12/2018 13:35	6.7	5.4	-0.20	75.0	1	No Change
CILFG032	2/13/2018 9:01	8.1	3.3	-0.18	70.0		Re Check
CILFG039	2/12/2018 13:29	9.9	6.8	-0.67	81.0	7	Decreased Vacuum
CILFG039	2/13/2018 9:06	7.9	9.2	-1.76	78.6		Decreased Vacuum
CILFG039	2/13/2018 9:09	6.6	9.7	-0.61	74.5		Decreased Vacuum
CILFG039	2/19/2018 10:21	17.4	3.1	-0.17	77.4		Re Check
CILFG080R	2/21/2018 8:11	23.2	14.4	-18.62	60.5	Failed 15 day	Decreased Vacuum
CILFG080R	2/21/2018 8:13	11.3	17.9	-4.87	60.7		Decreased Vacuum
CILFG080R	2/22/2018 14:57	28.0	13.1	-20.28	45.9		Decreased Vacuum
CILFG080R	2/26/2018 14:37	34.2	10.4	-20.57	54.8		Decreased Vacuum
CILFG080R	2/26/2018 14:39	28.6	12.7	-20.29	53.9		Decreased Vacuum
CILFG080R	3/8/2018 11:08	31.6	10.9	-21.24	49.7		Decreased Vacuum
CILFG080R	3/8/2018 11:16	26.1	12.1	-23.90	46.5		Re Check
CILFG087	2/6/2018 14:49	37.8	5.5	-11.85	86.0	<1	Decreased Vacuum
CILFG087	2/6/2018 14:52	41.6	4.5	-3.74	89.0		Re Check
CILFG191	2/6/2018 14:31	27.9	10.9	-21.27	41.9	8	Decreased Vacuum
CILFG191	2/6/2018 14:38	25.7	11.8	-10.21	38.8		Needs Repair
CILFG191	2/7/2018 7:39	39.4	6.1	-22.95	32.0		Increased Vacuum
CILFG191	2/7/2018 7:42	35.8	7.7	-22.65	32.0		Decreased Vacuum
CILFG191	2/14/2018 12:58	45.7	4.6	-12.40	55.0		Connected for Read
CILFG228R	2/21/2018 9:08	13.9	16.5	-6.84	64.4	15	Decreased Vacuum
CILFG228R	2/21/2018 9:29	32.0	10.8	-17.08	67.0		Increased Vacuum
CILFG228R	2/22/2018 14:42	11.4	18.0	-20.59	45.8		Decreased Vacuum
CILFG228R	2/22/2018 14:44	11.9	18.0	-21.09	45.1		Decreased Vacuum
CILFG228R	2/26/2018 14:14	24.1	12.8	-20.40	55.4		Decreased Vacuum
CILFG228R	2/26/2018 14:24	29.4	11.5	-20.32	54.9		Decreased Vacuum
CILFG228R	3/8/2018 10:58	68.7	3.4	1.71	52.7		Increased Vacuum
CILFG228R	3/8/2018 10:59	82.0	0.2	-18.66	52.8		Re Check
CILFG272	2/1/2018 14:24	33.6	5.4	-22.07	106.0	11	Decreased Vacuum
CILFG272	2/1/2018 14:28	21.8	8.2	-15.44	104.0		Decreased Vacuum
CILFG272	2/12/2018 11:09	46.8	2.7	-15.96	84.0		Re Check
CILFHC03	2/13/2018 14:39	10.9	9.2	-1.78	89.0	13	Decreased Vacuum
CILFHC03	2/13/2018 14:42	9.6	10.1	-0.26	87.0		No Change
CILFHC03	2/15/2018 10:13	12.9	9.6	-3.31	102.0		Decreased Vacuum
CILFHC03	2/15/2018 10:15	9.9	11.5	-0.65	95.4		Decreased Vacuum
CILFHC03	2/19/2018 10:38	18.8	5.3	-0.73	91.5		Decreased Vacuum
CILFHC03	2/19/2018 10:41	17.8	5.8	-0.59	90.3		Decreased Vacuum
CILFHC03	2/22/2018 15:04	17.5	5.5	-0.38	84.1		Decreased Vacuum
CILFHC03	2/22/2018 15:06	17.6	5.5	-0.34	81.2		Increased Vacuum
CILFHC03	2/26/2018 14:32	22.3	3.6	-0.30	84.8		Re Check

Device ID	Date/Time	CH <sub>4</sub> (%)	O <sub>2</sub> (%)	Static Pressure ("H <sub>2</sub> O)	Temperature (°F)	Length of Exceedance (days)	Comments
March							
CILFG050	3/12/2018 12:49	5.5	10.7	-17.59	54.0	3	Decreased Vacuum
CILFG050	3/12/2018 12:52	1.3	13.6	-2.00	51.5		Decreased Vacuum
CILFG050	3/15/2018 14:38	22.8	1.6	-0.81	48.6		Re Check
CILFG109	3/20/2018 8:01	20.3	11.9	-4.53	43.9	2	Decreased Vacuum
CILFG109	3/20/2018 8:05	10.0	16.1	-2.28	36.8		Re Check
CILFG109	3/22/2018 13:48	62.0	0.2	0.71	49.8		Increased Vacuum
CILFG109	3/22/2018 13:50	61.9	0.1	-0.15	55.7		Re Check
CILFG295	3/12/2018 10:45	0.1	22.7	-21.34	38.3	Failed 15 day	Decreased Vacuum
CILFG295	3/12/2018 10:47	0.1	22.8	-21.54	38.8		Decreased Vacuum
CILFG295	3/15/2018 14:37	0.1	22.6	-1.66	41.3		Decreased Vacuum
CILFG295	3/15/2018 14:40	0.1	22.6	-0.82	42.7		Re Check
CILFG295	3/20/2018 7:44	0.3	22.1	-0.87	40.1		Increased Vacuum
CILFG295	3/22/2018 13:38	0.0	21.1	-13.79	53.2		Decreased Vacuum
CILFG295	3/22/2018 13:41	0.0	21.2	-3.49	53.4		Decreased Vacuum
CILFG295	3/27/2018 13:55	1.6	20.1	-0.90	57.7		Decreased Vacuum
CILFG295	3/27/2018 14:00	0.3	21.3	-0.63	52.6		Increased Vacuum
CILFG295	3/27/2018 14:03	0.8	21.1	-10.92	46.9		Re Check
CILFHC03	3/12/2018 14:49	13.3	19.2	0.03	68.3	< 1	Increased Vacuum
CILFHC03	3/12/2018 14:51	34.1	0.7	-0.33	74.4		Re Check
April							
CILFG078R	4/5/2018 10:26	43.1	5.6	-5.79	51.1	<1	Decreased Vacuum
CILFG078R	4/5/2018 10:28	49.3	3.4	-10.81	56.2		Increased Vacuum
CILFG096	4/11/2018 9:05	25.2	12.1	-1.29	76.0	1	Decreased Vacuum
CILFG096	4/11/2018 9:08	26.4	11.6	-0.48	75.3		Decreased Vacuum
CILFG096	4/12/2018 10:57	35.2	7.6	-0.40	81.6		Decreased Vacuum
CILFG096	4/12/2018 11:01	56.4	0.7	0.02	81.0		Increased Vacuum
CILFG096	4/12/2018 11:03	56.0	0.7	-0.01	82.5		Re Check
CILFG109	4/11/2018 9:35	31.9	7.4	-1.32	58.1	6	Decreased Vacuum
CILFG109	4/11/2018 9:38	28.4	8.7	-0.59	57.4		Increased Vacuum
CILFG109	4/12/2018 11:15	22.3	10.5	-4.40	62.0		Decreased Vacuum
CILFG109	4/12/2018 11:18	12.0	15.7	-2.26	63.4		Increased Vacuum
CILFG109	4/17/2018 8:17	61.3	2.3	-0.45	51.4		Re Check
CILFG135R	4/5/2018 13:17	36.6	7.5	-14.74	56.3	7	Decreased Vacuum
CILFG135R	4/5/2018 13:20	27.0	11.2	-7.97	52.3		Increased Vacuum
CILFG135R	4/5/2018 13:24	38.0	7.4	-20.12	59.9		Decreased Vacuum
CILFG135R	4/12/2018 10:42	35.4	7.7	-15.07	102.3		Decreased Vacuum
CILFG135R	4/12/2018 10:47	36.2	7.4	-7.95	100.7		Decreased Vacuum
CILFG135R	4/12/2018 10:50	46.5	3.8	-1.15	96.9	Re Check	
CILFG228R	4/11/2018 10:09	19.3	13.8	-15.62	59.0	1	Increased Vacuum
CILFG228R	4/11/2018 10:12	18.0	14.0	-19.49	59.7		Decreased Vacuum
CILFG228R	4/12/2018 11:08	48.2	3.8	-1.02	67.3		Re Check
CILFG250	4/3/2018 9:32	42.9	8.8	-21.71	43.2	<1	Decreased Vacuum
CILFG250	4/3/2018 9:40	56.6	4.8	-19.91	42.6		Re Check
CILFHA07	4/5/2018 9:55	32.4	8.1	-8.72	55.0	7	Increased Vacuum
CILFHA07	4/5/2018 9:59	32.8	7.8	-10.25	54.7		Increased Vacuum
CILFHA07	4/12/2018 10:35	41.7	3.8	-20.08	70.5		Re Check
CILFHV02	4/10/2018 10:32	10.0	18.1	-34.91	56.1	10	Increased Vacuum
CILFHV02	4/10/2018 10:34	7.5	19.0	-36.09	56.6		Increased Vacuum
CILFHV02	4/12/2018 11:28	2.1	20.5	-17.49	70.1		Decreased Vacuum
CILFHV02	4/12/2018 11:31	2.4	20.3	-18.83	69.4		Increased Vacuum
CILFHV02	4/17/2018 8:49	24.4	13.2	-22.55	50.5		Decreased Vacuum
CILFHV02	4/17/2018 8:55	31.2	10.4	-13.61	50.6		Decreased Vacuum
CILFHV02	4/20/2018 7:59	45.9	4.8	-7.31	44.8		Re Check

Device ID	Date/Time	CH <sub>4</sub> (%)	O <sub>2</sub> (%)	Static Pressure ("H <sub>2</sub> O)	Temperature (°F)	Length of Exceedance (days)	Comments
May							
CILFG114R	5/9/2018 14:01	22.0	10.2	-22.90	92.5	< 1	Decreased Vacuum
CILFG114R	5/9/2018 14:05	44.0	4.4	-25.91	93.5		Re Check
CILFG207R	5/9/2018 13:40	39.4	5.6	-17.64	112.9	< 1	Decreased Vacuum
CILFG207R	5/9/2018 13:43	41.6	4.8	-1.97	97.4		Re Check
CILFG231R	5/2/2018 11:15	21.8	12.8	-22.20	86.1	2	Decreased Vacuum
CILFG231R	5/2/2018 11:23	33.4	8.6	-30.84	86.8		Decreased Vacuum
CILFG231R	5/4/2018 14:21	45.3	4.7	-19.37	90.9		Re Check
CILFHC14	5/3/2018 11:09	15.8	13.9	-12.52	85.0	6	Increased Vacuum
CILFHC14	5/3/2018 11:13	14.7	14.4	-14.51	84.9		Decreased Vacuum
CILFHC14	5/9/2018 13:15	29.9	2.1	-4.23	72.6		Re Check
June							
CILFG096	6/6/2018 10:44	38.5	6.3	-0.18	89.6	1	No Change
CILFG096	6/7/2018 8:45	38.7	6.4	-0.16	90.5		Decreased Vacuum
CILFG096	6/7/2018 8:48	46.5	3.9	-0.04	89.5		Re Check
CILFG139	6/26/2018 7:48	43.3	6.0	-27.42	75.9	< 1	Increased Vacuum
CILFG139	6/26/2018 7:52	46.4	4.8	-26.36	77.8		Re Check
CILFG241	6/6/2018 13:35	42.0	5.4	-18.52	80.8	< 1	Decreased Vacuum
CILFG241	6/6/2018 13:37	54.0	2.3	-21.74	80.1		Re Check
CILFHC18	6/14/2018 13:50	38.7	6.1	-23.79	87.8	1	Decreased Vacuum
CILFHC18	6/14/2018 13:55	30.9	9.0	-0.89	90.0		No Change
CILFHC18	6/15/2018 15:29	45.4	4.3	-2.84	87.0		Re Check

**WELLHEAD MONITORING RESULTS**  
**TEMPERATURE EXCEEDANCES (with passing read shown)**  
**Cherry Island Landfill**  
**JANUARY 1, 2018 THROUGH JUNE 30, 2018**

Condition 3 - Table 1 (c)(1)(x)(C) Emission Unit 3

Device ID	Date/Time	CH <sub>4</sub> (%)	O <sub>2</sub> (%)	Static Pressure ("H <sub>2</sub> O)	Temperature (°F)	Length of Exceedance (Days)	Comments
January							
CILFG202R	1/23/2018 14:02	58.2	0.1	-12.14	133.1	<1	Decreased Vacuum
CILFG202R	1/23/2018 14:05	58.1	0.0	-2.38	129.8		Re Check
CILFG302	1/23/2018 14:16	57.4	0.0	-7.94	133.4	2	Decreased Vacuum
CILFG302	1/23/2018 14:18	56.9	0.0	0.31	132.0		Increased Vacuum
CILFG302	1/23/2018 14:21	57.1	0.0	-1.03	132.7		Decreased Vacuum
CILFG302	1/25/2018 9:00	57.7	0.0	-2.30	129.4		Re Check
February							
No temperature exceedances to report for the month of February							
March							
No temperature exceedances to report for the month of March							
April							
No temperature exceedances to report for the month of April							
May							
CILFG202R	5/2/2018 10:52	57.5	0.1	-19.98	135.8	2	Increased Vacuum
CILFG202R	5/2/2018 10:57	57.6	0.0	-23.41	138.1		Opened Fully
CILFG202R	5/4/2018 14:16	57.7	0.2	-18.05	119.4		Re Check
CILFG254R	5/2/2018 10:53	56.9	0.0	-2.68	131.1	2	Increased Vacuum
CILFG254R	5/2/2018 10:55	56.6	0.0	-23.90	132.7		Opened Fully
CILFG254R	5/4/2018 14:13	57.7	0.2	-17.26	112.1		Re Check
June							
No temperature exceedances to report for the month of June							

**SUMMARY OF OXYGEN AND TEMPERATURE EXCEEDANCES  
JANUARY 1, 2018 THROUGH JUNE 30, 2018**

Oxygen

Month	Number of Vertical Gas Wells with Oxygen Exceedances	Number of Horizontal Collectors with Oxygen Exceedances
January	3	0
February	7	1
March	3	1
April	6	2
May	3	1
June	3	1

Temperature

Month	Number of Vertical Wells with Temperature Exceedances	Number of Horizontal Collectors with Temperature Exceedances
January	2	0
February	0	0
March	0	0
April	0	0
May	2	0
June	0	0

**QUARTERLY SURFACE EMISSION MONITORING EXCEEDANCES**  
**Cherry Island Landfill**  
**JANUARY 1, 2018 THROUGH JUNE 30, 2018**

Condition 3 - Table 1 (c)(1)(x)(C) Emission Unit 3  
January through March 2018 --- First Quarter Monitoring

Original Recording			10-Day Re-Monitoring Event			20-Day Re-Monitoring Event			1 Month Re-Monitoring Event		
Location	Reading	Date	Corrective Action	Reading	Date	Corrective Action	Reading	Date	Corrective Action	Reading	Date
CILFG033	521.00	01/24/18	Tuned Well	2.00	02/02/18	N/A			N/A	0.89	02/26/18
CILFG062R	2950.00	02/14/18	Cover Repair	325.00	02/23/18	N/A			N/A	4.22	03/16/18
CILFG092	747.00	03/08/18	Placed Clean Earth, Tamped	313.00	03/16/18	N/A			N/A	472.00	04/09/18
CILFG124R2	2930.00	02/14/18	Cover Repair	111.00	02/23/18	N/A			N/A	3.19	03/16/18
CILFG132	508.00	02/27/18	Tuned well	57.50	03/01/18	N/A			N/A	6.81	03/29/18
CILFG162	671.00	02/14/18	Cover Repair	295.00	02/23/18	N/A			N/A	11.32	03/16/18
CILFG175	1948.00	02/14/18	Cover Repair	402.00	02/23/18	N/A			N/A	2.84	03/16/18
CILFG177R	773.00	02/14/18	Cover Repair	393.00	02/23/18	N/A			N/A	5.97	03/22/18
CILFG187	2851.00	02/27/18	Cover Repair	81.03	03/01/18	N/A			N/A	45.88	03/29/18
CILFG189	748.00	02/27/18	Cover Repair	283.00	03/01/18	N/A			N/A	19.82	03/29/18
CILFG226R	721.00	02/27/18	Cover Repair	70.50	03/01/18	N/A			N/A	136.00	03/29/18
CILFG239R	1244.00	03/08/18	Placed Clean Earth, Tamped	207.00	03/16/18	N/A			N/A	304.00	04/09/18
CILFG280	772.00	02/14/18	Cover Repair	88.72	02/23/18	N/A			N/A	30.15	03/16/18
CILFG305	852.00	02/27/18	Cover Repair	305.00	03/01/18	N/A			N/A	28.38	03/29/18
CILFHB07	682.00	02/27/18	Cover Repair	206.00	03/01/18	N/A			N/A	469.00	03/29/18
CILFHC08	1758.00	02/14/18	Cover Repair	454.00	02/23/18	N/A			N/A	51.06	03/16/18
CILFHC21	6549.00	02/27/18	Cover Repair	72.17	03/01/18	N/A			N/A	21.63	03/29/18



East Pump Station	531.00	02/27/18	Cover Repair, Foamed Lid	392.00	03/09/18	N/A			N/A	179.00	03/29/18
MH-04	1255.00	01/24/18	Foamed Lid	299.00	02/02/18	N/A			N/A	322.00	02/26/18
MH-V2	6145.00	02/14/18	Cover Repair	931.00	02/23/18	Refoamed Manhole Lid	482.0	03/06/18	N/A	199.00	03/16/18
MH-V2 VALVE BOX	747.00	02/14/18	Cover Repair	439.00	02/23/18				N/A	54.26	03/16/18
Path Point 381	2342.00	02/20/18	Cover Repair	116.00	03/01/18	N/A			N/A	14.50	03/22/18
Path Point 408	504.00	02/20/18	Cover Repair	156.00	03/01/18	N/A			N/A	94.00	03/22/18
Path Point 409	39514.00	02/20/18	Cover Repair	409.00	03/01/18	N/A			N/A	45.92	03/22/18
T-26 Drain	994.00	02/14/18	Cover Repair	39.69	02/23/18	N/A			N/A	15.86	03/16/18
T-32 Drain	1217.00	02/27/18	Cover Repair	72.73	03/01/18	N/A			N/A	19.87	03/29/18

Total Exceedances: 26  
Total Points Monitored: 1,489

April through June 2018 --- Second Quarter Monitoring

Original Recording			10-Day Re-Monitoring Event			20-Day Re-Monitoring Event			1 Month Re-Monitoring Event		
Location	Reading	Date	Corrective Action	Reading	Date	Corrective Action	Reading	Date	Corrective Action	Reading	Date
Central Pump Station	1278.00	05/01/18	Cover Repair	351.00	05/08/18	N/A			N/A	259.00	05/31/18
CILFG135R	661.00	04/17/18	Cover Repair	195.00	04/25/18	N/A			N/A	3.84	05/18/18
CILFG142	1366.00	05/08/18	Restored Vacuum	132.00	05/18/18	N/A			N/A	277.00	06/07/18
CILFG143	1474.00	05/08/18	Restored Vacuum	262.00	05/18/18	N/A			N/A	120.00	06/07/18
CILFG176	2681.00	05/01/18	Cover Repair	238.00	05/08/18	N/A			N/A	476.00	05/31/18
CILFG204	4529.00	05/01/18	Cover Repair	9.50	05/08/18	N/A			N/A	92.76	05/31/18
CILFG238	2427.00	05/15/18	Cover Repair	239.00	05/24/18	N/A			N/A	97.00	06/14/18
CILFG244R	4032.00	05/08/18	Cover Repair	121.00	05/18/18	N/A			N/A	111.00	06/07/18
CILFG270	884.00	05/08/18	Restored Vacuum	197.00	05/18/18	N/A			N/A	187.00	06/07/18
CILFG271	1453.00	05/08/18	Restored Vacuum	7.39	05/18/18	N/A			N/A	377.00	06/07/18
CILFG283	1533.00	05/15/18	Cover Repair	130.00	05/24/18	N/A			N/A	83.00	06/14/18
CILFG287	10300.00	05/23/18	Cover Repair, boot	38.77	05/25/18	N/A			N/A	12.56	06/22/18
CILFG290	883.00	05/08/18	Cover Repair	39.22	05/18/18	N/A			N/A	88.00	06/07/18
CILFG308	541.00	05/08/18	Restored Vacuum	91.00	05/18/18	N/A			N/A	35.97	06/07/18
CILFG309	1196.00	05/01/18	Cover Repair	222.00	05/08/18	N/A			N/A	421.00	05/31/18
CILFG317	846.00	05/01/18	Cover Repair	19.27	05/08/18	N/A			N/A	78.26	05/31/18
CILFHB06	666.00	04/25/18	Restored Vacuum	Event missed	05/05/18	N/A	6.70	5/15/18	N/A	16.47	05/25/18
CILFGHC20	1762.00	05/01/18	Cover Repair	350.00	05/08/18	N/A			N/A	337.00	05/31/18
CILFHV02	1816.00	05/08/18	Restored Vacuum	6524.00	05/18/18	Cover repair/boot	151.00	5/25/18	N/A	47.44	06/07/18
MH-18	1106.00	05/08/18	Restored Vacuum	24.72	05/18/18	N/A			N/A	17.40	06/07/18

MH-19	3766.00	05/08/18	Restored Vacuum	19.24	05/18/18	N/A			N/A	94.86	06/07/18
MH-01	727.00	04/18/18	Cover Repair	257.00	04/27/18	N/A			N/A	23.01	05/18/18
MH-02	721.00	04/18/18	Cover Repair	348.00	04/27/18	N/A			N/A	13.20	05/18/18
Path Point 406	2739.00	05/14/18	Cover Repair	10.92	05/23/18	N/A			N/A	114.00	06/14/18
South Central Pump Station	836.00	05/01/18	Cover Repair	312.00	05/11/18	N/A			N/A	340.00	05/31/18

Total Exceedances: 25  
Total Points Tested: 1487

Notes:

CILFG=Gas Extraction Well

All readings in parts per million by volume (PPM)

<b>January through March 2018 --- First Quarter Monitoring</b>		
<b>Location</b>	<b>Latitude</b>	<b>Longitude</b>
CILFG033	39.7303	-75.5159
CILFG062R	39.7247	-75.5167
CILFG092	39.7260	-75.5109
CILFG124R2	39.7236	-75.5159
CILFG132	39.7276	-75.5128
CILFG162	39.7235	-75.5172
CILFG175	39.7264	-75.5170
CILFG177R	39.7261	-75.5170
CILFG187	39.7229	-75.5106
CILFG189	39.7252	-75.5099
CILFG226R	39.7248	-75.5105
CILFG239R	39.7265	-75.5120
CILFG280	39.7232	-75.5137
CILFG305	39.7248	-75.5114
CILFHB07	39.7248	-75.5101
CILFHC08	39.7230	-75.5148
CILFHC21	39.7277	-75.5153
East Pump Station	39.7234	-75.5096
MH-04	39.7317	-75.5187
MH-V2	39.7208	-75.5154
MH-V2 VALVE BOX	39.7208	-75.5154
Path Point 381	39.72441	-75.51287
Path Point 408	39.72569	-75.51348
Path Point 409	39.72586	-75.51362
T-26 Drain	39.7199	-75.5135
T-32 Drain	39.7246	-75.5088

<b>April through June 2018 --- Second Quarter Monitoring</b>		
<b>Location</b>	<b>Latitude</b>	<b>Longitude</b>
Central Pump Station	39.72590	-75.51836
CILFG135R	39.72273	-75.51506
CILFG142	39.72744	-75.51203
CILFG143	39.72684	-75.51188
CILFG176	39.72646	-75.51795
CILFG204	39.72695	-75.51482
CILFG238	39.72635	-75.51007
CILFG244R	39.72642	-75.51293
CILFG270	39.72720	-75.51160
CILFG271	39.72688	-75.51217
CILFG283	39.72467	-75.51091
CILFG287	39.72620	-75.51342
CILFG290	39.72709	-75.51274
CILFG308	39.72776	-75.51183
CILFG309	39.72809	-75.51231
CILFG317	39.72145	-75.51640
CILFHB06	39.72430	-75.51036
CILFGHC20	39.72752	-75.51509
CILFHV02	39.72742	-75.51080
MH-18	39.72807	-75.51125
MH-19	39.72754	-75.51021
MH-01	39.73303	-75.52043
MH-02	39.73273	-75.52002
Path Point 406	39.72518	-75.51268
South Central Pump Station	39.72021	-75.51394

WELL COMMISSIONING LOG  
Cherry Island Landfill  
JANUARY 1, 2018 THROUGH JUNE 30, 2018

Gas Well	New Gas Well	Phase	Approximate Drill Depth	Date Drilled	Date "R" well brought online	Date Original was Decom.
No wells were recommissioned and no new wells were commissioned during this time period.						

